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DEPARTMENT OF COMMERCE

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E. E. PRATT, Chief

MISCELLANEOUS SERIES—No. 34

THE MEN'S FACTORY-MADE CLOTHING INDUSTRY

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REPORT ON THE COST OF PRODUCTION OF MEN'S FACTORY-MADE CLOTHING IN THE UNITED STATES

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LETTER OF SUBMITTAL.

DEPARTMENT OF COMMERCE,
BUREAU OF FOREIGN AND DOMESTIC COMMERCE,
Washington, January 8, 1916.

SIR: I beg to submit herewith a report on the cost of production of men's ready-made clothing, which is the fifth of a series of reports issued by the Bureau of Foreign and Domestic Commerce regarding the cost of production in different branches of the clothing industry.

This investigation was conducted in accordance with the act of Congress approved August 23, 1912. In addition to the cost of production, the report contains information concerning imports and exports, working conditions, factory equipment, selling methods, and other trade conditions of interest in connection with the men's clothing industry, and some practical suggestions with regard to efficient factory management based on interviews with manufacturers and on the personal observations of the special agents.

According to the Census of Manufactures, the value of men's clothing produced in the United States was $208,960,136 in 1899 and $485,677,493 in 1909, an increase of over 75 per cent. Under the head of men's clothing the Census Bureau includes boys' clothing and such outer garments as overalls, market frocks, butchers' aprons, uniforms, bathing suits, knee pants, and gymnasium and sporting clothing. Of the value of product for 1909, the value returned by regular factories was $439,860,259, the remaining amount, $45,817,234, which is mostly a duplication, being the product of the contract shops.

The manufacture of ready-made clothing is developed to a far greater extent in the United States than in any other country. The imports of men's clothing into the United States are negligible. The total value of woolen wearing apparel imported for consumption during the fiscal year ended June 30, 1914, not including gloves, hats, hosiery, and knit goods, was $1,633,700. The imports consist almost entirely of novelty garments, such as overcoats, and golfing and motoring clothes. The computed ad valorem rate of duty on wearing apparel, composed wholly or in part of wool, varied from 73.10 to 78.49 per cent during the fiscal years 1898 to 1909, and from 74.14 to 77.09 per cent during the fiscal years 1909 to 1913. By the tariff act of 1913 the rate was reduced to 35 per cent ad valorem. The exports of clothing, while very small compared with the domestic

production, are larger than the imports. During the fiscal year 1914 the exports of woolen wearing apparel of all kinds amounted to $2,148,235. Most of these exports went to North American countries, principally Canada and Mexico.

In the investigation of the cost of production of men's clothing, reports were secured from 64 establishments, located in eight clothing-manufacturing centers—New York, Philadelphia, Baltimore, Rochester, Cleveland, Cincinnati, Chicago, and Milwaukee. Some of these establishments were large and some small, but all were fairly representative of the industry. Their sales of men's clothing during their last business period, usually a year, amounted to $66,947,954.

The census figures for 1909, which are the latest available, show that the total production of men's clothing in that year amounted to $485,677,493 in value. The census classification, however, included many articles of manufacture which are not produced by the establishments covered by this investigation, as is shown on page 21.

The concrete results of the investigation appear in the summary of this report, while the detailed information is given in the various chapters.

The general conduct of the field work of the investigation has been under the direction of Walter B. Palmer, a special agent of the Bureau of Foreign and Domestic Commerce. In the field work and in the preparation of the report he was assisted by Special Agents David M. Barclay, Joseph Broido, Harry Gell, Thomas Mills, Stanley D. Winderman, and Charles F. Yauch. The general direction of the office work and the editing of the report have been in charge of Gustavus A. Weber, expert in charge of the cost of production division, assisted by Henry J. Bierman.

E. E. PRATT,
Chief of Bureau.

To Hon. WILLIAM C. REDFIELD,
Secretary of Commerce.

THE MEN'S FACTORY-MADE CLOTHING INDUSTRY.

INTRODUCTION.

HISTORY OF THE CLOTHING TRADE.

The ready-made clothing industry developed from a need for clothing that could be delivered immediately and that could be purchased at lower prices than were charged by custom tailors. The industrial revolution and the early establishment of the factory system in Europe, while the great bulk of the American population was still following agricultural pursuits, created the necessity for coarse work clothes in Europe, which did not exist until later in the United States. Ready-made clothing was unknown in this country before 1825 and its manufacture in factories did not begin until a much later date. Before ready-made clothing was introduced, clothing was made in the home or by a custom tailor, often an itinerant. The cloth was sometimes woven in the home and sometimes purchased.

The manufacture of ready-made clothing was probably an outgrowth of the secondhand clothing business, which originally supplied the demand for cheap clothing. Ready-made clothing was first made up to supply the wants of hurriedly departing New England sailors and of the Negroes on the plantations, and was probably first produced in New Bedford, and then in Boston and New York. The first systematic attempt to manufacture ready-made clothing in the United States began early in the thirties, and the clothing then produced was of the coarsest materials and workmanship. About 1831 George Opdyke, once mayor of New York, began the manufacture of ready-made clothing in Hudson Street.[a] Some large firms which exist to-day had their beginning and were well established before the Civil War. The South and the West were the chief consumers of the early coarse ready-made clothing, the consumers being the sailors, plantation negroes, and miners. In these pioneer days the manufacturer was a retailer also; as there was no retail outlet for his merchandise, the manufacturer had to establish his own retail stores to dispose of his product. Up to the time of the Civil War, the amount of ready-made clothing was not extensive. What little manufacturing was done was in the large coast cities of the East, Boston and New York particularly. Here only, because of nearness to the woolen markets and because of the comparatively large labor supply, was such manufacturing possible. The sewing was all done by hand. The secondhand clothing business had established markets and trade customs that were taken over by the ready-made clothing

[a] The Clothing and Furnishing Trade, by William C. Browning, in One Hundred Years of American Commerce, Vol. II, p. 561.

manufacturers. Many custom tailors were impressed into the new business as the latter increased, and from them the manufacturers acquired technique.

About 1850 the sewing machine, invented in 1846, was put on the market. The machine at first was cumbersome and slow and was usually run by foot power. Moreover, the stitch first used very often ripped. About this time the woolen mills had begun to manufacture raw materials cheaply, and they started to manufacture material for the clothing trade. The invention of the lock stitch and the availability of cheap raw materials greatly increased production. In 1859 there were 4,014 establishments, employing 114,800 wage earners,[a] the principal centers being New York, Boston, Philadelphia, Baltimore, Rochester, and Cincinnati. St. Louis became the chief distributor for the West and New Orleans for the South.

In 1860 there were no factories, as we understand the term. Ready-made garments were cut by the manufacturer. The cheapest grades were sent to the country surrounding the principal centers to be made up by the farmers' women folks during the winter months or in any spare time. The better grades were sewed by city workers in their homes, or by custom-tailor employees in the back of the custom shops during the slow seasons. The entire garment was usually made by one worker. By some German tailors the work was roughly divided into machine sewing, basting, and finishing, the women of the tailors' family assisting them.

THE INDUSTRY DURING THE CIVIL WAR.

When the Civil War broke out, though a large amount of clothing was bought in Prague and Vienna,[b] owing to the inability of American manufacturers to meet the sudden demand, and though the Government manufactured some uniforms from purchased cloth, large quantities of uniforms for the armies were bought from American manufacturers. One manufacturer alone received an order for $1,250,000 worth.[c] The sudden demand for uniforms created an industry devoted to ready-made clothing. The ready-made clothing manufacturers, cut off from their chief market, the South, looked to the Government to replace their lost business. At first Army uniforms, like ordinary ready-made clothing, were made in the homes of the workers, but as the war progressed and hurried demands for Army clothing increased, factories devoted to the manufacture of uniforms were established. The war thus created factory buildings, which were used for the manufacture of civilian ready-made clothing when the war was over. Without the sewing machine it is hardly probable that American manufacturers could have turned out in time the large quantities of uniforms required. The war had many other beneficial influences on the trade. In the Government workshops there were some sort of standardization, a greater subdivision of labor, and efficient factory methods, unknown to the clothing manufacturer, all of which were indirectly to influence the ready-made clothing industry. The Government, in furnishing measurements for

[a] See table No. 3, p. 21.
[b] Jesse E. Pope, Clothing Industry in New York, p. 9.
[c] The Clothing and Furnishing Trade, by William C. Browning, in One Hundred Years of American Commerce, Vol. II, p. 562.

uniforms, supplied manufacturers with some idea of human proportions with which to guide themselves in making clothing for civilian use.

DEVELOPMENT AFTER THE WAR.

The close of the war in 1865 witnessed the first important development of the clothing trade. The requirements of hundreds of thousands of soldiers returning to civil life and the general need in the South caused the factories that had been established for making uniforms to turn to ready-made clothing. In spite of an increased number of factories and of improvements in the sewing machine that decreased the time necessary for making a garment, manufacturers were unable for a long time to supply the great demand.

For the same grade of work that prior to the war had averaged only $8 to $10 per week for a man and his wife (in this wage being included payment for the use of the machine, fuel for heating the irons, thread, buttons, and light) wages averaged $20 to $25 a week during the period of stimulated manufacturing that followed the war.[a] The man who used his own machine at home had a better opportunity of securing work than the tailor who worked on a machine rented from or belonging to the manufacturer. In the manufacturer's shop such as they were at this period, the worker paid for thread, sundries, fuel for heating the irons, etc.

The seventies and eighties were the days of the pioneers. Railroad construction and extension opened up the West and Southwest. Thousands of new communities grew up. Immigration, ever increasing, began to move westward from the ports of entry. The demand for ready-made clothing grew by leaps and bounds to supply the demands of the vast numbers of new Americans and the home seekers. Chicago, because of the opening up and rapid growth of the West, became an important clothing center in the seventies. It was not only the important railroad center for the vast territory that was being settled, but was located in a rich and well populated region where there was need of ready-made clothing. The retail establishments that supplied this demand required long terms, which included extra dating and a credit of four months. A man who paid his bills 60 days from date was regarded as a discounter. Manufacturers required large capital to carry along their customers, so that big clothing houses were the rule.

Clothing was manufactured for stock, chiefly of a medium grade. The manufacture of stock was not hazardous in this period, as the great majority of customers purchased clothing in quantities, without regard for style, workmanship, or fabric. Blanket orders were frequent. Slow-selling stock did not remain on the manufacturer's hands as it does now. The profits of the business were large. In each of the large centers there were a number of manufacturers whose annual sales amounted to $500,000 to $1,000,000. A very few had sales up to $2,000,000 or $2,500,000 a year.

The supplying of this great demand for ready-made clothing was made possible by the introduction of many labor-saving devices and by the type of worker that was coming into the trade. Up to 1870 all cutting was done by shears. Between 1870 and 1875 manufacturers began using the long knife, worked up and down by hand

[a] Report of the Committee of the Senate on Education and Labor, 1885, Vol. I, pp. 414, 743.

through slots in the table and capable of cutting 18 thicknesses of cloth. The cutting machine introduced later consisted of a rapidly revolving circular disk blade, capable of cutting 24 layers of cloth. This machine was crude and dangerous, however, and not much in favor. Sewing machines were still run by foot power.

In the early seventies the German and Austro-Hungarian Jews entered the clothing industry. Up to this time the sewing-machine operators were women, and a large number of machines continued to be run by women for many years; but many of these German and Austro-Hungarian men began working as sewing-machine operators exclusively, and they have gradually supplanted the women to a very large extent.

From the year 1880 may be said to date the rapid development of the clothing industry. The small cities and towns of the West and Southwest were firmly established, immigration crowded the ports, and the population rapidly increased. With the development of other industries, clerks, teachers, small merchants, and other classes who wished to dress well, but were not able to patronize the custom tailor, turned to ready-made clothes. The general demand of the people, whatever their occupation or station, to be well dressed, greatly stimulated the clothing trade.

EFFECT OF IMMIGRATION.

The history of the clothing trade is bound up in immigration and it is necessary to understand the racial factors in a study of the industry.

Up to and through the early eighties the Irish and the Germans constituted the chief labor supply for the industry, but with the coming of large numbers of Russian Jews after 1882, the importance of the Irish and Germans declined. The Russian Jews generally settled in New York City, though they later migrated to Baltimore, Chicago, and Philadelphia. They introduced the outside shop and the task system in New York. With the coming of this large Russian Jewish immigration began the decline of Boston, which had been up to this time the chief wholesale clothing center, and New York assumed the leadership. These Russian immigrants huddled together, the family keeping many boarders and lodgers, usually relatives or friends from their home towns or the unmarried sons and daughters of such friends and relatives. The lodgers usually entered the trade of the head of the house, and as the space afforded by the living rooms became too small for the work, the head of the house rented rooms elsewhere, thus creating the small shop apart from the home.

INTRODUCTION OF TASK SYSTEM.

In the task system that the Russian Jewish contractor introduced, there was a "team" of three; one did the machine sewing or operating, another the basting, and another the finishing. Originally, the operator and the baster were men and the finisher a woman, but later the entire team was made up of men. Though wages were nominally week wages, the pay was on a piece-rate basis, since the week's wage was paid not for labor expended during one week but for the completion of a certain number of coats. A man who worked a week and

produced only two-thirds of the weekly task would be paid only two-thirds of the weekly wage. Since the task was a team task, the quickest of the team was constantly speeding up his team mates to keep pace with him. As the system became established, the tendency was more and more to lower wages by increasing the task required in return for the week's wage.

Long hours and driving went with increasing the task. The contractor took advantage of the peculiar characteristic of the Jewish worker, who was content to work all hours of the day and night, provided his weekly wages were larger. The fact that the task worker earned more weekly than other workers under other systems does not take into account the number of hours worked by each. The task worker earned more per week, but at the expense of sleepless nights, early morning toil, and overexertion, which resulted, in most instances, in making physical wrecks of once robust immigrants. In this system, which was employed among Jewish workers only, the operator did all the machine sewing; the baster, who was the tailor of the team, put the garment together and did the incidental pressing, while the finisher did the less important basting and handwork. The contractor, who was usually more skilled, did the trimming and fitting and the off pressing. The buttonholes at this time were made in special buttonhole shops; at a much later date, when the size of the shops warranted it, the buttonhole maker installed a machine in each shop for which he worked.

During this period the task system was employed on the "closed" or "balloon" made coat. Until the early nineties most of the coats made in New York were made up by this system. It was not employed, however, in manufacturing trousers or vests. There is some question whether the task system ever got a foothold outside of New York, but it is probable that as the New York task worker drifted to other centers he took the system with him.

The Bohemian immigrants came at about the same time as the Jewish. They located in Chicago and Baltimore, where the few men who entered the tailoring trade established family shops. As the necessity arose girls were taken in to do the machine and the less important hand work. The Poles, like the Bohemians but unlike the Jews, permitted their women to enter the trade, and the men engaged in it only in limited numbers. The Polish immigrants came in the late eighties and generally settled in Chicago. The Lithuanians, like the Poles, came in the late eighties and entered the industry in Philadelphia and Baltimore. The Germans were at this time and have continued to be the chief source of labor supply in Rochester.

INSANITARY SHOP CONDITIONS.

The period after 1880 is marked by the greatly improved quality of the product, by factory or shop work superseding home work, by the introduction of steam and of gas, by the use of electric-power machines in the place of the old foot-power machine, by the growth of the contract system, sweatshops, and home finishing, and by the discontinuation of giving out work in the rural districts to be made by the wives and daughters of the farmers.

Though the tenement house appeared in New York in the sixties, overcrowding and sanitary conditions were probably at their worst

in the eighties. The workers, all immigrants, lived and worked together in large numbers, in a few small, foul, ill-smelling rooms, without ventilation, water, or near-by toilets. They slept on the unswept floors littered with the work, the work table serving as the dining table as well. The following is a description of the shop and the conditions of labor usual at that period:

> The workshops occupied by these contracting manufacturers of clothing, or "sweaters," as they are commonly called, are foul in the extreme. Noxious gases emanate from all corners. The buildings are ill smelling from cellar to garret. The water-closets are used alike by males and females, and usually stand in the room where the work is done. The people are huddled together too closely for comfort, even if all other conditions were excellent. And when this state of affairs is taken into consideration, with the painfully long hours of toil which the poverty-stricken victims of the contractors must endure, it seems wonderful that there exists a human being that could stand it for a month and live. We are not describing one or two places, for there is hardly an exception in this class of manufactories in all New York.[a]

Children have never been employed to a great extent in this industry, as their usefulness is limited to a very few operations, like pulling out bastings. Their chief employment then as now appears to have been acting as carriers of goods from the shop to the home and vice versa.

The buttonhole machine was introduced in the early eighties, but the great mechanical advance at this time was rather the improvement of machines already on the market than the introduction of new ones.

As the home became too small for the number of people employed, the head of the family rented rooms in a tenement to be utilized as workrooms, or in some instances built small shops in the yards of the dwelling houses, as was usually the case with the Germans. The Jew in New York usually set apart one of his living rooms for a shop, and here we find the beginning of the sweatshop. The rented shops, apart from the dwelling, were unsuited for manufacturing. The large numbers of friendless immigrants whose only acquaintance might be their fellow countryman who was a tailor, gave such an energetic tailor the opportunity to become a contractor.

The number of people employed in the average coat shop in this period was about 20, and in the pants and vest shops, much less.

The end of the eighties and the early nineties witnessed the great Italian immigration. The Italians settled especially in New York, women first entering the industry. Italian women came into the trade in such large numbers that they, at present, do practically all the finishing in most centers, and, numerically, hold first place in New York and Philadelphia among all women employees. The Italian men entered the trade after the women and to-day are to be found in large numbers in most of the clothing centers. The Italians were as industrious as the Jews, lived even more squalidly and in more wretched quarters, were easily contented, and being satisfied to work for prices that even the Jewish worker considered too meagre, gradually supplanted the Jews, forcing them to become contractors, enter business, or seek other centers.

[a] Second Annual Report of the Factory Inspectors of New York for the year ending Dec. 1, 1887, p. 26.

INTRODUCTION OF SUBDIVISION OF LABOR.

The Tenement House Act of 1892 in New York, which prohibited contractors from manufacturing in their homes, and legislation in other places were the principal factors resulting in the establishment of larger shops. Contractors rented shops and lofts built for manufacturing purposes, installed many machines, and entered into the making of clothes on a large scale. As the contractor's shop grew in size, the contractor looked about for means of lowering his labor cost. To utilize the labor of women and girls, which could be purchased cheaper, contractors introduced in New York, about 1895, a system of work that had been introduced in Boston by English tailors. This system employed a greater subdivision than any system previously mentioned; it did away with the need of the highly skilled tailor, as each person performed just one task that was simple to learn. This system was employed chiefly on coats of the better grade, made on what is known as the "open" method. Since the introduction of this system, the subdivision of labor has constantly increased, until some factories now have as many as 150 operations in the making of a coat.

This tendency to increase the number of operations has been developed with the idea of so subdividing the work that each operation can be taught easily and quickly, and the skilled tailor and high labor costs will be done away with. Only a minute subdivision of labor enabled the clothing manufacturer to utilize the hordes of unskilled workers that swarmed to this country after 1880.

IMMIGRATION OF TAILORS.

The following tables show the number of immigrant tailors admitted annually from 1875 to 1914, and the percentage from each country or of each race. The classification from 1875 to 1898 was on the basis of nationality. The year 1896 has been omitted, as there was no nationality classification that year, only the total number of tailors admitted, by sex, being given. In 1897 and 1898, though the classification was still based on nationality, Austria-Hungary was subdivided into Hungary, Bohemia and Moravia, Galicia and Bukowina, and other Austria; these divisions were combined to correspond to the classification Austria-Hungary, given from 1875 to 1895. Russia (proper), Poland, and Finland were combined to form Russia-Poland, and Norway and Sweden, which were given individually, to form Norway and Sweden. In 1899 the immigration classification was changed from nationality to race or people; therefore the figures from 1899 to 1914 are not comparable with those of previous years. The figures for 1875 to 1898, inclusive, follow.

TABLE 1.—NUMBER AND PERCENTAGE OF TAILORS OF DIFFERENT NATIONALITIES ADMITTED TO THE UNITED STATES DURING THE YEARS ENDED JUNE 30, 1875 TO 1898.

[Data for 1875 to 1880, from the Annual Report of the Superintendent of Immigration, 1892; for 1881 to 1895, from the Annual Reports of the Superintendent of Immigration; for 1897 and 1898, from the Annual Reports of the Commissioner General of Immigration.]

Years.	Austria-Hungary.	France.	Germany.	England.	Scotland.	Ireland.
1875	140	98	497	233	28	123
1876	96	47	295	128	20	66
1877	47	44	215	87	14	40
1878	67	20	231	98	18	41
1879	86	26	295	142	23	75
1880	251	26	695	262	28	125
1881	298	44	1,374	233	36	103
1882	196	38	1,935	254	39	120
1883	216	33	1,797	216	53	124
1884	354	38	1,506	223	43	121
1885	185	35	855	202	41	101
1886	315	19	729	201	61	68
1887	509	31	979	350	85	83
1888	409	48	1,190	300	153	87
1889	338	42	952	394	154	140
1890	577	51	854	287	103	81
1891	681	42	1,172	324	56	84
1892	413	47	913	227	50	79
1893	543	22	820	230	61	91
1894	535	13	529	158	36	104
1895	432	26	331	300	52	175
1897	427	16	260	77	22	61
1898	679	12	303	82	6	51
Total	7,794	818	18,627	5,008	1,177	2,145
Per cent	11.4	1.2	27.2	7.3	1.7	3.1

Years.	Italy.	Norway and Sweden.	Russia-Poland.	Switzerland.	British North America.	Other countries.	Total.
1875	44	79	74	17	102	28	1,463
1876	26	71	73	16	66	63	969
1877	16	36	59	11	66	33	668
1878	19	50	122	12	99	43	815
1879	45	82	83	37	105	63	1,062
1880	54	203	238	53	132	67	2,134
1881	156	236	208	103	197	118	3,106
1882	303	206	335	94	110	118	3,748
1883	207	202	131	99	50	107	3,235
1884	148	122	531	73	67	91	3,317
1885	117	119	419	34	23	97	2,228
1886	213	177	762	32	(a)	105	2,682
1887	219	240	1,086	37	(a)	150	3,769
1888	139	238	770	29	(a)	132	3,495
1889	169	191	1,240	47	(a)	142	3,809
1890	347	143	1,260	35	(a)	141	3,879
1891	462	198	2,651	13	(a)	181	5,864
1892	447	208	2,759	27	(a)	164	5,334
1893	459	194	1,225	16	(a)	147	3,808
1894	448	125	1,084	18	(a)	134	3,184
1895	329	138	937	7	(a)	140	2,867
1897	1,162	102	1,106	7	(a)	85	3,325
1898	869	98	1,589	8	(a)	229	3,826
Total	6,398	3,458	18,742	825	1,017	2,578	68,587
Per cent	9.3	5.0	27.3	1.2	1.5	3.8	100.0

a Immigrants from British North American possessions not included.

Up to 1882, of the three races that were to play important rôles in the clothing trade, the largest number of tailors came from Germany, those from Russia and Italy being comparatively few. Germany continued its leadership for a few years after 1882, but the number began to decrease annually from 1891. The Russian immigrants appeared in large numbers in 1884, and this large immigration

continued down to 1898. The Italian immigration appears to have started in large numbers in 1890, and generally continued to increase, being largest in 1897.

The following table shows the number and percentage of immigrant tailors of various races admitted to the United States during the years ended June 30, 1899 to 1914, inclusive:

TABLE 2.—NUMBER AND PERCENTAGE OF TAILORS OF DIFFERENT RACES ADMITTED TO THE UNITED STATES DURING THE YEARS ENDED JUNE 30, 1899 TO 1914.

[Data from the Annual Reports of the Commissioner General of Immigration.]

Years.	Bohemian and Moravian.	English.	German.	Hebrew.	Irish.	Italian (north).
1899	70	60	224	3,664	51	119
1900	83	64	270	7,031	69	180
1901	106	76	315	5,981	55	157
1902	162	51	484	6,110	74	178
1903	227	129	786	9,233	74	206
1904	332	175	808	16,426	124	222
1905	273	248	906	22,334	177	239
1906	365	175	940	18,418	113	321
1907	371	224	1,079	21,779	131	310
1908	288	225	821	14,882	136	188
1909	165	188	528	6,862	152	81
1910	218	303	707	12,552	128	118
1911	244	247	689	12,681	147	141
1912	231	213	658	12,154	113	172
1913	307	238	695	15,408	105	192
1914	229	235	770	19,793	92	231
Total	3,671	2,851	10,680	205,308	1,741	3,055
Per cent	1.2	0.9	3.6	68.3	0.6	1.0

Years.	Italian (south).	Lithuanian.	Polish.	Russian.	Scandinavian (Norwegians, Danes, and Swedes).	Other.	Total.
1899	1,061	36	163	45	122	218	5,833
1900	1,322	74	260	14	133	399	9,899
1901	1,978	59	226	11	184	461	9,609
1902	1,934	67	391	25	227	666	10,369
1903	3,258	66	481	127	397	1,005	15,992
1904	3,302	106	420	110	412	1,143	23,580
1905	2,591	178	589	137	370	1,224	29,266
1906	3,998	156	671	103	300	1,422	26,982
1907	3,344	314	884	187	299	1,722	30,644
1908	1,912	185	618	196	177	1,107	20,735
1909	1,151	97	248	61	181	735	10,449
1910	2,146	275	503	149	285	1,317	18,701
1911	2,518	198	500	184	266	1,363	19,178
1912	2,490	183	596	238	178	1,610	18,836
1913	2,434	227	885	311	170	1,962	22,934
1914	2,676	252	691	353	169	1,912	27,403
Total	38,115	2,476	8,126	2,251	3,870	18,266	300,410
Per cent	12.7	0.8	2.7	0.8	1.3	6.1	100.0

From 1899 to 1914 the Hebrews constituted the great majority of the skilled immigrant tailors, being 68.3 per cent of all the immigrant tailors admitted to this country during that period. The next largest immigration was the south Italians, who comprised 12.7 per cent of the total tailors admitted. Together, the Hebrews and south Italians furnished the clothing trade, during this period, with 81 per cent, or slightly over four-fifths of all the tailors admitted. The German tailors in this period comprised only 3.6 per cent of the total

tailors admitted, a very considerable decrease from their position during the years 1875 to 1898. The Russian and Polish immigration, which appeared so large in the 10 or 12 years preceding 1899, dropped to 3.5 per cent in this period, showing probably that most of the immigration of tailors included as Russian from 1875 to 1898 was classed as Hebrew in the later period.

The total immigration of tailors from 1875 to 1898, exclusive of 1896, was 68,587; for 1896 the number was 4,021;[a] and from 1899 to 1914, 300,410; making a grand total of 373,018 tailors admitted to the United States from 1875 to 1914, inclusive.

It must be remembered that during the early years of this immigration clothing manufacturers were dependent to a great extent upon this skilled foreign labor supply. With the introduction of labor-saving devices and a more complete subdivision of labor in which there were few operations requiring the services of the skilled tailor, this dependence lessened and the immigration of tailors became a minor factor in the trade. Though the Hebrew and south Italian immigration of tailors is the largest, it does not show the total number of these peoples in the trade. The peoples of other races did not usually enter the clothing trade unless they had been tailors abroad, but vast numbers of Jews and south Italians who had no previous tailoring experience were brought into the industry when new machinery was introduced and a greater subdivision of labor made possible the employment of inexperienced help.

INTRODUCTION OF THE LARGE INSIDE SHOP.

From about 1895 we find the establishment and extension of the large inside shop, with its better light, ventilation, and sanitary conditions, and the introduction of factory methods. Legislation that affected all clothing centers now brought the industry under State supervision. The public demanded finer goods in clothing as well as in other wearing apparel. Manufacturers began to start their lines at higher prices, to show more styles, and to pay more attention to the question of style. In 1907 the production of suits retailing at $20 or more is estimated as being ten times as great as it was in 1897. The manufacturers adopted trade-marks and began to advertise their products throughout the country. This practice made the large inside shop necessary, for unless the advertising was backed by a uniform product, which could not result from the employment of numerous contractors, the money expended upon such advertising was wasted. To satisfy the demand for better clothing, better workmanship and closer supervision than could be secured from the contractor were necessary. The inside shop could get out goods more promptly than if dependence was placed upon several contractors, and the manufacturer with an inside shop had a certainty of production not possible when working with contractors. Inside manufacturing insured that the linings, canvas, hair cloth, etc., would be used as intended and lessened the risk of having the style copied. The inside shop greatly improved working conditions and installed all the labor-saving special machinery that was constantly being introduced about this time. These machines—edge-pressing, serging, collar and lapel padding, various felling, tacking and ticket-

[a] Annual Report of the Commissioner General of Immigration, 1896.

sewing machines—saved time and did away with much hand work. Generally, the contractor was not financially able to install these machines. The big inside shop also installed electric power, while some of the smaller outlying shops and the contractors employed foot or gas power, as steam power, which was originally used, was not adaptable to small shops. The manufacturers who established inside shops were probably not aware that they were adopting the means, if efficiently handled, of reducing cost and competing with their former contractors. The manufacturers, however, employed these contractors as foremen, superintendents, etc., in the new inside shops, and the foreman brought with him ideas and methods of manufacturing, which, while to an extent successful with small groups where the relationship of employer and employee was intimate and racial, could not but work disastrously when applied to a large factory. Often foremen were hired solely for their ability to procure help from among their countrymen, as the large inside house had difficulty in securing sufficient employees, there being no employment agencies and newspaper advertising having proved futile. Some of the large successful houses have gotten beyond this point, but even now many large inside houses are run on the plan of the small contract shop, being simply a number of small shops assembled under one roof.

The year 1907 was the high-water mark in the history of ready-made clothing, but the panic of that year dealt the trade a severe blow. Contrary to the previous history of the clothing trade, this panic did not increase the demand for ready-made clothing, and what appears to be most surprising is that the manufacturers selling the high grades of merchandise suffered least. Probably their increased advertising held their trade, and possibly many people accustomed to go to the custom tailor for fine suits turned to ready-made clothing.

TAILOR-TO-THE-TRADE HOUSES.

By the year 1907, a new factor, the tailor-to-the-trade house, had arisen in the clothing trade, which was destined to play a very important rôle. These houses originally supplied the small retailer with specials (out-of-proportion suits) or special styles or fabrics that such retailer could not afford to carry in his ready-made stock. From this beginning the tailor-to-the-trade house grew until it rivaled the largest of the ready-made manufacturers. With its large lines of styles and fabrics it drove the country merchant tailor out of business, and took away from the ready-made wholesaler the business of the small country retailer, usually a general storekeeper. This was especially true of the South, where the small merchant took advantage of the opportunity not to carry any stock, substituting therefor the style and swatch book of the tailor-to-the-trade house.

DECLINE OF THE SEPARATE TROUSERS BUSINESS.

The last 15 years has seen the decline and almost disappearance of the separate trousers business. Years ago a complete suit was a rarity, its symmetry and pleasing effect on the eye being unappreciated. The consumer who still had his prejudice against ready-made clothing, and there were many, went to the custom tailor for

his coat, and then to a retailer for a pair of ready-made pants. Dark coats and gray striped trousers were the prevailing style, but all sorts of incongruous combinations were frequent. The ready-made trousers business in this period was enormous, being a great proportion of the whole ready-made clothing trade. As the large houses began to advertise and preach suits, and as the general public began to substitute entire suits for separate coat and pants, the pants business declined rapidly. Where thousands of successful wholesalers once engaged in the business, we find to-day a very few houses making separate pants and these usually make also overcoats, raincoats, Palm Beach suits, and the like, to keep up their sales. The number of houses making pants exclusively is very limited and such few houses, with one or two exceptions, do a small business. They have been aided, however, to a great extent by the present demand for separate trousers for yachting, tennis, and other sports.

DECLINE OF THE JOBBING BUSINESS.

In the old days, when terms were long, manufacturers needed some customers who would pay their bills shortly after the receipt of the goods. That was the day of the jobber. The jobber bought his goods cheaper than did the retailer, or he received a larger discount and often extra long dating, which meant the same thing. This was due to the fact that he purchased in great quantities, usually when the manufacturer's plant was dull, and paid for his goods on receipt or in 10 days. Getting his goods cheaper, the jobber was enabled to resell his clothing at prices that competed with goods sold by the manufacturer to the retailer direct, though often the jobber's price was much higher. The jobber usually sold to the merchants in the small cities, towns, and villages, merchants to whom manufacturers would not extend credit. His salesmen covered places that the manufacturer's salesmen shunned. His headquarters were located usually in the center of his customers' territory, so that these small merchants, at little expense, could come in to buy what they needed. Sometimes the jobber had large stocks on hand of merchandise very much in demand, and large retailers who could not procure the needed clothing from the manufacturers, purchased it from him. The jobber, selling to the small country merchant, who depended upon his customers' crops for payment of goods purchased during the season, had to extend very long terms, so that the jobber necessarily had to have a very large capital. He was a banker as well as a merchant.

With the rise and growth of the tailor-to-the-trade house whose swatch cards and style books were to be found in the stores of the smallest merchants, with the shutting down on long selling terms by manufacturers, which meant that they would not have to carry so many accounts along from year to year, and with the development of a highly organized selling organization by most manufacturers, the need for the jobber, who in earlier times had really performed a community service, disappeared.

THE LAST IMPORTANT STRIKE.

The last strike of any importance in the clothing trade took place from December 30, 1912, to March 1, 1913. Though the strike was centered principally against the New York market, it took place to some extent in Philadelphia, Boston, Rochester, and Baltimore. In Chicago it was very slight. As a result of the strike, wages were increased, generally from 5 to 10 per cent, and there was a reduction in hours of work from 56 to 52 and 53. No formal written agreement was entered into with the Manufacturers' Association; the differences were adjusted verbally. The wage increase in New York was a minimum of $1 per week for each employee, the amount varying in the different shops.

In the case of contractors, in New York, a written agreement was entered into that was to last one year. The principal features of this agreement were the recognition of the union, time-work for coat makers, 50 hours to comprise a week's work, and the installation of electric power. The immediate indirect result of the strike was to wipe out many small contractors who could not, with 50 hours as the basis for a week's pay, work for their former small wages, which was the principal reason for manufacturers giving them the work. These small contractors, moreover, did not have the money to install electric power. After the expiration of the year that the written agreement was to run, contractors were not asked to renew the agreement, the union simply sending notices to the contractors that the conditions stipulated in the written agreement were assumed to continue.

Through the efforts of the union the task system has been practically abolished. It exists nowhere except in New York, and here task shops are few and small.

GROWTH OF THE INDUSTRY.

The statistics regarding establishments engaged in the production of men's clothing published by the Bureau of the Census include figures for establishments engaged in the manufacture of men's, boy's, and children's clothing, and such outer garments as overalls, market frocks, butcher aprons, uniforms, bathing suits, knee pants, and gymnasium and sporting clothing. This classification also includes establishments engaged in contract work on clothing where the materials, or the greater part of them, are furnished.

The following table is taken from the report of the United States Census of Manufactures for 1909:

TABLE 3.—GROWTH OF THE MEN'S CLOTHING INDUSTRY IN THE UNITED STATES, 1849–1909.

[Thirteenth Census, 1909, Manufactures, Vol. VIII, p. 398.]

Years.	Number of establishments.	Wage earners (average number).	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
1849	4,278	96,551	$15,032,340	$25,730,258	$48,311,709	$22,581,451
1859	4,014	114,800	19,856,426	44,149,752	80,830,555	36,680,803
1869	7,858	108,128	30,746,579	86,794,706	148,660,253	61,865,547
1879	6,166	160,813	45,940,353	131,363,282	209,548,460	78,185,178
1889	4,867	144,926	51,075,837	128,846,857	251,019,609	122,172,752
1899	5,729	120,927	45,496,728	145,218,798	276,717,357	131,498,559
1904	4,504	137,190	57,225,506	185,793,436	355,796,571	170,003,135
1909	5,584	191,183	89,644,921	252,522,567	485,677,493	233,154,926

The next two paragraphs accompany the table in the census report:

Clothing, men's.—The value of products of this branch of the clothing industry represented in 1909 nearly one-half of the total value of products for all the clothing industries combined.

An important feature of this industry is that many establishments manufacture clothing on a contract basis from materials furnished by others. Many of these establishments are small and often much of the work is done by the contractor and his family. Other establishments working under contract, however, are of considerable size, employing large numbers of wage earners. In order to bring out the extent to which this practice obtains, a segregation has been made of those establishments which manufactured clothing from their own materials and those which worked exclusively on materials furnished by others—in many cases by establishments of the class first mentioned. The following statement shows separate data for these two classes of establishments in 1909:

TABLE 4.—MEN'S CLOTHING INDUSTRY, REGULAR FACTORIES AND CONTRACT SHOPS, 1909.

[Thirteenth Census, 1909, Manufactures, Vol. VIII, p. 398.]

Classes.	Number of establishments.	Wage earners (average number).	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
Regular factories	2,367	126,196	$56,360,952	$249,690,748	$439,860,259	$190,169,511
Contract shops	3,217	64,987	33,283,969	2,831,819	45,817,234	42,985,415
Total	5,584	191,183	89,644,921	252,522,567	485,677,493	233,154,926

The value of products reported for contract shops consists chiefly of the amount received for work performed for regular factories, which in turn report the value of their finished output, enhanced by the work done on contract. The former value, therefore, in the main represents duplication. The wages paid by contract shops must, however, be included, to obtain the entire outlay for wages in the industry.

On analyzing the data in Table 3, it will be seen that there was a large increase of production in every decade after 1849. By comparison of the statistics for 1879 with those for 1909, 30 years later, it will be noted that the production increased by $276,129,033, or 131.77 per cent; the cost of materials increased by $121,159,285, or 92.23 per cent; the wages increased by $43,704,568, or 95.13 per cent, while the average number of wage earners increased by 30,370, or only 18.89 per cent. The average earnings of the workers during 1879 were $285.68, and during 1909, $468.90.

It will be noticed that there was an enormous increase of production between 1899 and 1909. During that decade the value of the products increased by $208,960,136, or 75.51 per cent. This percentage of increase was more than three times as great as the increase of population. The population of the United States, exclusive of outlying possessions, was 75,994,575 in 1900, and 91,972,266 in 1910, an increase of 15,977,691, or 21 per cent.

The average production per establishment was $48,301 in 1899, $78,996 in 1904, and $86,977 in 1909, showing a large increase in the average size of establishments.

Table 5, on pages 24–25, shows the number of establishments manufacturing men's clothing, their capital, value of products, and average number of wage earners in 1904 and 1909, by States and cities arranged in the order of the value of their products in 1909.

From 1904 to 1909 the value of men's clothing produced in the United States increased by $129,880,922, or 36.50 per cent. The product in New York State in 1909, $230,211,324, was 47.40 per cent of the product in the United States; the product in Illinois, $86,807,021, was 17.87 per cent. The percentages of increase of production among the States that increased over 25 per cent during the five years from 1904 to 1909 were as follows: Alabama, 149.49; Washington, 85.28; West Virginia, 77.86; Michigan, 59.70; Illinois, 57.25; Virginia, 55.29; Maryland, 49.28; New Hampshire, 49.04; Kansas, 39.77; Texas, 39.01; Wisconsin, 38.02; Nebraska, 37.94; New York, 37.71; Missouri, 33.00; Indiana, 27.43; New Jersey, 26.99; Iowa, 25.36.

The production in New York City in 1909, $195,555,371, was 40.26 per cent of the production in the United States; the production in Chicago, $83,785,584, was 17.25 per cent. The percentages of increase of production among the cities that increased over 25 per cent during the five years from 1904 to 1909 were as follows: Cleveland, 88.88; Chicago, 57.40; Detroit, 56.94; Baltimore, 49.43; New York, 42.63; Milwaukee, 31.07; Rochester, 26.29.

While production in the United States increased by 36.50 per cent, the average number of wage earners increased by 53,993, or 39.36 per cent.

Table 6, on pages 26–27, gives the number of wage earners (men, women, and children) in establishments manufacturing men's clothing in the United States, and the wages paid to men, women, and children, in 1904 and 1909, by States and cities, arranged in the order of the value of their products in 1909.

On comparing the number of children 14 and 15 years old (2,963) with the total average number of workers (137,190) in 1904, the percentage is found to be 0.22. On making the same comparison for 1909 the percentage of children is found to be 0.18.

The average amount of earnings was $417.13 in 1904 and $468.90 in 1909.

SCOPE AND METHOD OF INVESTIGATION.

This investigation of the cost of manufacturing men's ready-made clothing was undertaken in compliance with the act of Congress approved August 23, 1912, which created the Bureau of Foreign and Domestic Commerce and which contained the following section providing for investigations of the cost of production of articles dutiable in the United States:

Those certain duties of the Department of Labor, or Bureau of Labor, contained in section seven of the act approved June thirteenth, eighteen hundred and eighty-eight, that established the same, which especially charged it "to ascertain, at as early a date as possible, and whenever industrial changes shall make it essential, the cost of producing articles at the time dutiable in the United States, in leading countries where such articles are produced, by fully specified units of production, and under a classification showing the different elements of cost, or approximate cost, of such articles of production, including the wages paid in such industries per day, week, month, or year, or by the piece; the hours employed per day; and the profits of manufacturers and producers of such articles; and the comparative cost of living, and the kind of living; what articles are controlled by trusts or other combinations of capital, business operations, or labor, and what effect said trusts, or other combinations of capital, business operations, or labor have on production and prices," are hereby transferred to and shall hereafter be discharged by the Bureau of Foreign and Domestic Commerce, and it shall also be the duty of said Bureau of Foreign and Domestic Commerce to make such special investigation and report on particular subjects when required to do so by the President or either House of Congress.

TABLE 5.—NUMBER OF ESTABLISHMENTS MANUFACTURING MEN'S CLOTHING, CAPITAL, VALUE OF PRODUCTS, AND AVERAGE NUMBER OF WAGE EARNERS, 1904 AND 1909, BY STATES AND CITIES.

[Data from the records of Bureau of the Census.]

States and cities.	Number of establishments.		Capital.		Value of products.			Wage earners, average number.		
	1904	1909	1904	1909	1904	1909	Increase.	1904	1909	Increase.
STATES.							*Per cent.*			*Per cent.*
New York	2,177	2,720	$63,370,399	$98,965,087	$167,167,536	$230,211,324	37.71	53,836	76,135	41.42
Illinois	588	685	18,834,691	37,356,077	55,202,999	86,807,021	57.25	20,283	34,690	71.03
Maryland	121	317	9,019,897	15,693,891	19,654,916	29,341,722	49.28	8,671	15,197	75.26
Pennsylvania	311	515	12,490,044	14,927,916	22,662,115	27,921,756	23.21	9,466	12,494	31.99
Ohio	340	314	11,980,401	13,411,859	18,496,173	22,510,895	21.71	6,556	8,572	30.75
Massachusetts	166	228	5,386,345	7,132,138	13,028,012	15,818,516	21.42	3,963	5,256	32.63
Missouri	61	70	4,316,607	6,939,155	8,872,831	11,801,305	33.00	4,853	5,660	16.63
Wisconsin	97	84	3,685,963	6,474,508	6,525,276	9,006,477	38.02	2,811	4,096	45.71
Michigan	38	32	1,744,467	3,312,024	3,838,599	6,130,092	59.70	2,060	3,301	60.24
Kentucky	137	120	4,841,327	3,694,404	6,279,078	5,800,693	a 7.62	3,614	3,634	.55
New Jersey	93	115	1,620,994	2,697,172	4,386,158	5,569,951	26.99	3,193	3,740	17.13
Indiana	34	33	1,836,411	2,696,007	4,044,053	5,153,392	27.43	2,536	2,938	15.85
California	73	50	984,931	1,653,859	3,627,617	3,907,517	7.72	1,634	1,792	9.67
Tennessee	25	27	1,281,363	2,214,349	2,961,581	3,270,823	10.44	1,878	1,544	a 17.78
Minnesota	25	27	1,961,835	1,567,179	2,581,210	3,020,676	17.03	1,452	1,555	7.09
Iowa	18	28	1,324,852	533,634	1,919,557	2,406,452	25.36	1,176	1,407	19.64
Georgia	14	17	548,498	930,876	1,481,949	1,770,828	19.49	1,022	1,085	6.16
Texas	16	23	744,062	1,534,782	1,204,859	1,674,820	39.01	690	930	34.78
North Carolina	16	19	943,774	983,464	1,400,730	1,581,011	12.87	879	807	a 8.19
Virginia	14	20	462,589	956,768	953,883	1,481,251	55.29	739	968	30.99
Nebraska	5	5	371,273	693,885	996,859	1,375,077	37.94	640	788	23.13
West Virginia	6	6	486,061	490,556	730,767	1,299,759	77.86	234	261	11.54
Louisiana	28	13	1,322,571	1,063,141	1,979,308	1,073,513	a 45.76	1,200	735	a 38.75
Vermont	7	7	603,015	672,162	917,536	994,862	8.43	566	537	a 5.12
Mississippi	7	6	1,235,004	572,087	1,262,621	775,029	a 38.62	678	482	a 28.91
New Hampshire	9	9	208,291	366,617	437,651	652,281	49.04	258	351	36.05
Connecticut	15	21	180,698	256,804	515,783	597,580	15.86	297	189	a 36.36
Kansas	6	10	181,138	230,535	344,640	481,718	39.77	201	297	47.76
Washington	7	7	146,934	236,682	241,505	447,466	85.28	144	218	51.39
Maine	28	25	239,096	186,448	542,994	393,786	a 27.48	650	338	a 48.00
Alabama	3	5	67,335	216,494	133,486	333,035	149.49	117	194	65.81
South Carolina	5	5	53,590	113,469	136,700	138,607	1.40	125	99	a 20.80
All other States	14	21	703,044	1,938,993	1,267,589	1,928,258	52.12	768	893	16.28
United States	4,504	5,584	153,177,500	230,703,112	355,796,571	485,677,493	36.50	137,190	191,183	39.36
CITIES.										
New York	1,707	2,350	46,194,332	78,372,785	137,104,900	195,555,371	42.63	40,707	61,275	50.52
Chicago	563	659	17,863,120	35,753,963	53,230,436	83,785,584	57.40	18,924	32,890	73.80
Baltimore	115	310	8,946,613	15,624,572	19,565,474	29,236,539	49.43	8,555	15,090	76.39
Philadelphia	220	414	10,170,373	11,396,544	18,077,809	21,852,261	20.88	5,458	8,233	50.84
Rochester	239	196	7,891,099	10,808,113	14,948,703	18,878,508	26.29	6,161	7,732	25.50
Cincinnati	209	171	9,745,751	9,473,888	14,214,293	15,293,200	7.59	3,939	4,769	21.07
Boston	128	189	4,643,047	5,970,464	11,346,004	13,799,955	22.71	2,986	4,292	43.74
St. Louis	46	40	2,780,905	4,375,222	5,497,201	6,336,175	15.26	2,809	2,614	a 6.94
Milwaukee	80	62	2,748,445	4,535,542	4,759,548	6,238,488	31.07	1,884	2,639	40.07
Cleveland	70	87	1,594,581	3,207,853	2,978,547	5,625,959	88.88	1,482	2,560	72.74
Detroit	28	19	1,276,054	2,393,733	2,957,095	4,640,811	56.94	1,560	2,740	75.64
Louisville	19	17	3,114,539	2,552,599	4,484,604	4,102,233	a 8.53	1,634	1,948	19.22
Syracuse	52	54	2,030,259	1,972,184	3,082,052	3,393,284	10.10	1,308	1,589	21.48
San Francisco	62	33	916,704	1,148,060	3,265,212	2,705,554	a 17.14	1,346	1,083	a 19.54

a Decrease.

TABLE 6.—NUMBER OF WAGE EARNERS IN ESTABLISHMENTS MANUFACTURING MEN'S CLOTHING, AND WAGES PAID MEN, WOMEN, AND CHILDREN, 1904 AND 1909, BY STATES AND CITIES.

[Data from the records of Bureau of the Census.]

States and cities.	1904					1909				
	Men.	Women.	Children.	Total average number.	Wages.	Men.	Women.	Children.	Total average number.	Wages.
STATES.										
New York	33,020	20,584	232	53,836	$26,008,458	52,279	29,011	306	76,135	$42,076,422
Illinois	8,093	11,598	592	20,283	9,799,156	17,861	18,132	265	34,690	16,042,983
Maryland	3,210	4,592	869	8,671	2,791,436	7,629	7,326	671	15,197	6,356,540
Pennsylvania	4,177	4,890	399	9,466	3,604,670	6,473	6,412	389	12,494	5,671,708
Ohio	2,115	4,349	92	6,556	2,570,405	3,108	5,904	328	8,572	3,620,035
Massachusetts	1,651	2,276	36	3,963	1,793,199	2,589	3,117	54	5,256	2,568,894
Missouri	875	3,873	105	4,853	1,740,546	1,757	4,379	95	5,660	2,216,593
Wisconsin	606	2,160	45	2,811	949,885	1,016	3,236	205	4,096	1,413,608
Michigan	239	1,810	11	2,060	633,250	441	3,166	.....	3,301	1,142,540
Kentucky	659	2,826	129	3,614	1,014,502	747	2,809	121	3,634	1,127,193
New Jersey	1,472	1,697	24	3,193	1,322,361	1,699	2,165	44	3,740	1,733,506
Indiana	358	2,155	23	2,536	713,570	479	2,596	31	2,938	978,266
California	604	1,026	4	1,634	694,335	312	1,469	.....	1,792	746,652
Tennessee	306	1,476	96	1,878	390,765	338	1,348	30	1,544	389,230
Minnesota	162	1,286	4	1,452	450,501	187	1,582	.....	1,555	500,481
Iowa	158	999	19	1,176	335,494	154	1,329	37	1,407	406,660
Georgia	100	866	56	1,022	264,842	131	981	20	1,085	299,153
Texas	73	594	23	690	178,937	88	959	37	930	294,515
North Carolina	119	711	49	879	193,619	148	735	29	807	190,821
Virginia	64	651	24	739	164,649	107	907	20	968	240,813
Nebraska	39	585	16	640	197,967	55	697	3	788	257,615
West Virginia	22	211	1	234	63,769	69	220	.....	261	101,010
Louisiana	114	1,026	60	1,200	246,975	83	809	4	735	144,668
Vermont	49	517	.....	566	153,524	40	523	.....	537	181,102
Mississippi	137	503	38	678	169,055	101	425	.....	482	114,942
New Hampshire	22	236	.....	258	82,637	38	353	.....	351	125,490
Connecticut	55	242	.....	297	115,990	109	114	.....	189	72,715
Kansas	36	165	.....	201	57,140	34	296	.....	297	83,752
Washington	17	127	.....	144	51,606	24	236	.....	218	78,474
Maine	117	533	.....	650	166,817	89	295	.....	338	97,732
Alabama	12	105	.....	117	27,473	4	194	3	194	47,615
South Carolina	15	105	5	125	25,454	21	108	2	99	20,196
All other States	63	694	11	768	252,019	98	852	759	893	302,997
United States	58,759	75,468	2,963	137,190	57,225,506	98,308	102,685	3,453	191,183	89,644,921
CITIES.										
New York	28,305	12,347	55	40,707	20,946,081	45,722	19,798	122	61,275	35,392,629
Chicago	7,878	10,483	563	18,924	9,406,447	17,589	16,532	947	32,890	15,429,117
Baltimore	3,205	4,483	867	8,555	2,768,645	7,619	7,210	666	15,090	6,334,808
Philadelphia	3,437	1,812	209	5,458	2,584,652	5,585	2,937	128	8,233	4,277,371
Rochester	2,558	3,504	91	6,161	2,544,936	3,904	4,247	71	7,732	3,808,562
Cincinnati	1,442	2,410	87	3,939	1,591,249	1,924	3,099	172	4,769	2,214,103
Boston	1,426	1,540	20	2,986	1,446,808	2,326	2,349	26	4,292	2,208,265
St. Louis	728	2,003	78	2,809	1,117,320	860	1,978	81	2,614	1,252,830
Milwaukee	452	1,394	38	1,884	608,724	843	1,892	181	2,639	959,483
Cleveland	484	995	3	1,482	641,612	978	1,688	127	2,560	1,029,515
Detroit	164	1,385	11	1,560	472,433	342	2,648	10	2,740	942,496
Louisville	372	1,242	20	1,634	539,116	467	1,422	38	1,948	631,824
Syracuse	489	797	22	1,308	511,696	669	972	25	1,589	675,011
San Francisco	574	770	2	1,346	594,060	238	748	.....	1,083	485,353

The investigation was begun in February, 1915, and the field work was completed within four months. Special agents of the Bureau of Foreign and Domestic Commerce secured reports from 64 establishments. Of these establishments, 30 are located in New York City, where the industry is largely centered, 7 in Rochester, 7 in Philadelphia, 6 in Baltimore, 6 in Cincinnati, 4 in Chicago, and 4 in Cleveland and Milwaukee. Twelve establishments that were requested to permit an examination of their books for the purpose of ascertaining the cost of production refused to do so.

The total net sales of the 64 establishments reporting during their last business year amounted to $66,947,954, the average being $1,046,061. The net sales of 27 establishments were under $500,000; of 14 establishments, $500,000 and under $1,000,000; of 14 establishments, $1,000,000 and under $2,000,000; of 9 establishments, $2,000,000 and over.

According to the Census of Manufactures the value of men's clothing produced in the United States in 1909 was $485,677,493.[a] Of this amount the net sales of the 64 establishments that reported for this investigation were 13.78 per cent. The census figures, $485,677,493, include men's, boys', and children's clothing, and such outer garments as overalls, market frocks, butchers' aprons, uniforms, bathing suits, knee pants, and gymnasium and sporting clothing, and also the value of products of contract shops, amounting to $45,817,234. The 64 establishments reporting in this investigation manufactured only men's ready-made clothing.

The object of the investigation was to ascertain the details of the cost of manufacturing men's ready-made clothing, the income from sales and miscellaneous sources, and the profit made by each establishment during its last business year. The following forms, called establishment schedules, were prepared for the entry of such data:

Establishment No. .....

CONFIDENTIAL.

Neither the name nor the location of the establishment is to appear on this schedule or in connection with any figures that are furnished.

UNITED STATES

DEPARTMENT OF COMMERCE,

BUREAU OF FOREIGN AND DOMESTIC COMMERCE,

WASHINGTON.

CLOTHING INDUSTRY—ESTABLISHMENT SCHEDULE.

1. Branch of clothing industry.....
2. Kinds of garments made in this factory.....
3. Individual, partnership, limited partnership, or corporation.....
4. Report for business year, beginning———, 191—, and ending ————, 191—.

[a] Table 3, shown on page 21.

(A) MATERIAL COST.

Materials used in wearing apparel.	Per cent imported.	Purchases during year at gross billed cost.
1. Cloth	.....	$.....
2.	.....	.....
3.	.....	.....
4.	.....	.....
5.	.....	.....
6.	.....	.....
7. Buttons, thread, sundries	.....	.....
8. Gross materials purchased		.....
9. Deduct returns and allowances		.....
10. Actual materials purchased		.....
11. Deduct discount taken during year		.....
12. Net materials purchased		.....
13. Freight and cartage inward, with proportionate stable or garage expense		.....
14. Cost of materials purchased, delivered		.....
15. Add inventory of materials at beginning of year		.....
16. Total		.....
17. Deduct inventory of materials at end of year	$.....	
18. Deduct sales of materials at net cost (enter profit on same at G–22; loss at G–11)	.....	
19. Deduct receipts from waste	.....	
20. Total deductions		.....
21. Net cost of materials used		.....

(B) DIRECT LABOR.

1. Wages of all employees in manufacturing occupations	.....
2. Paid to contractors	.....
3. Paid to home workers (by establishment, not by contract shops)	.....
4. Total direct labor	.....

(C) INDIRECT LABOR.

1. Salaries of officials, partners, or individual owner, chargeable to manufacturing	.....
2. Wages of factory superintendent, foremen, and forewomen	.....
3. Wages of designers	.....
4. Wages of employees in sample department	.....
5. Wages of other general help—machinist, clerks in factory (not general office), packing and shipping (not show room) hands, floor boys and girls, etc. (not including engineer and fireman shown at D–4)	.....
6. Total indirect labor	.....

(D) FACTORY EXPENSE.

1. Rent of space used for manufacturing and shipping departments (not including items at D–4)	.....
2. Repairs: To buildings (not including additions), $.....; to machinery and fixtures (not including replacements), $.....; total	.....
3. Power, heat (or fuel and wages of engineer and fireman), light, and water	.....

4. Fire insurance (this year only): On buildings, $.....; on machinery, stock, etc., $.....; total..... $.....
5. Insurance—other kinds (this year only)..... .....
6. Workmen's compensation or employers' liability..... .....
7. Welfare work, $.....; charities, $.....; total..... .....
8. State, county, township, and municipal taxes: On real estate, $.....; on machinery, stock, etc., $.....; total..... .....
9. Other factory expense (specify important items, entering "Miscellaneous expense" for balance)..... .....
10. ....
11. Total factory expense..... .....

(E) COST OF ADMINISTRATION.

1. Salaries of officials, partners, or individual owner, not chargeable to indirect labor or cost to sell..... .....
2. Salaries of general office force and auditor..... .....
3. Rent of general office..... .....
4. Office supplies, stationery, postage, telegrams, telephones..... .....
5. Expense of collection and legal service..... .....
6. Bad debts apportioned to this year..... .....
7. Corporation (not income) tax: United States, $.....; State, $.....; total..... .....
8. Other administrative expense (specify important items, entering "Miscellaneous expense" for balance)..... .....
9. ....
10. ....
11. Total cost of administration..... .....

(F) COST TO SELL.

1. Salaries of officials, partners, or individual owner, chargeable to sales department..... .....
2. Salaries, commissions, traveling and general expense of salesmen... .....
3. Wages of other employees in sales department (not including packing and shipping help shown at C–5)..... .....
4. Rent of showroom..... .....
5. Freight and express charges prepaid and cartage outward, with proportionate stable or garage expense..... .....
6. Advertising (not including advertising for help) and circularizing.. .....
7. Cases and other packing material..... .....
8. Other selling expense (specify important items, entering "Miscellaneous expense" for balance)..... .....
9. ....
10. Total cost to sell..... .....

(G) PROFIT AND LOSS STATEMENT.

Outgo.		*Income.*	
1. Material cost (A–21).....	$.....	17. Gross sales, less returns and alowances.....	$.....
2. Direct labor (B–4).....	.....	18. Deduct discounts allowed...	.....
3. Indirect labor (C–6).....	.....	19. Net sales.....	.....
4. Factory expense (D–11).....	.....	20. Inventory, except materials (A–17), end of year.....	.....
5. Administrative cost (E–11)...	.....	21. Income from bank balances and interest on bills receivable, paid, or accrued.....	.....
6. Selling cost (F–10).....	.....	22. Other income items, from investments outside manufacturing business of this establishment: Specify..	.....
7. Garments purchased.....	.....	23.	.....
8. Inventory, except materials (A–15), beginning of year.	.....	24.	.....
9. Interest.....	.....	25. Total income.....	.....
10. Depreciation: Of buildings owned, $.....; of machinery and fixtures, $.....; total.....	.....	26. Loss.....	.....
11. Other expense items, on investments outside manufacturing business of this establishment: Specify...	.....	27. Total.....	.....
12.	.....		
13.	.....		
14. Total outgo.....	.....		
15. Profit.....	.....		
16. Total.....	.....		

28. File with the schedule copies of profit and loss statements for previous years, as far back as possible. If unobtainable, give the following items (provided they can be obtained from the books, as far back as possible:

Year ending ....., 19.... Net sales, $.....; profit, $.....; loss, $.....
Year ending ....., 19.... Net sales, ...; profit, ...; loss, ...
Year ending ....., 19.... Net sales, ...; profit, ...; loss, ...
Year ending ....., 19.... Net sales, ...; profit, ...; loss, ...
Year ending ....., 19.... Net sales, ...; profit, ...; loss, ...
Year ending ....., 19.... Net sales, ...; profit, ...; loss, ...

(H) BALANCE SHEET.

File with the schedule copies of the balance sheets, showing assets and liabilities, at the beginning and end of the last business year, and during the year, if any.

Whenever practicable, file with the schedule copies of the balance sheets for previous years, as far back as possible.

(I) GENERAL INQUIRIES.

1. Increase of capital stock during year, amount, $.....; date, ..., 191...
2. Was capital stock increased by stock dividend or cash sale?.....
3. Cost of new machinery purchased during year (not to be charged against cost of manufacturing)..... $.....
4. Cost of other additions and betterments during year (not to be charged against cost of manufacturing)..... $.....
5. Usual time and cash discount allowed to retailers, ...; to jobbers, ...; to commission houses which guarantee accounts, ...; which do not guarantee accounts, ...
6. Per cent of sales during year to domestic retailers, ...; to domestic jobbers, ...; to domestic commission houses which guarantee accounts, ...; which do not guarantee accounts, ...
7. Per cent of sales during year exported, ...; amount exported, $.....
   If possible, specify amount exported to each country.
8. .....
9. .....
10. .....

(J) NUMBER OF EMPLOYEES.

1. State average number engaged in direct labor (B–1), including helpers not on pay roll, and in indirect labor (C–2–3–4–5), and engineer and fireman (D–4), in the establishment (not contract shops) during 191 , by months:

January.....	April.....	July.....	October.....
February....	May.....	August.....	November.....
March.....	June.....	September.....	December.....

2. Classify, as follows, such employees during the month (busy season) of ....., 191 :

16 years of age and over.				Under 16 years of age.			
Male.		Female.		Male.		Female.	
Time.	Piece.	Time.	Piece.	Time.	Piece.	Time	Piece.

3. Officials or partners actively engaged in the business: Indirect labor (C–1), ...; administration (E–1), ...; cost to sell (F–1), ...; total (none counted twice), ...
4. What operations in making or trimming garments are performed by contract? .....
5. Enter under "Remarks" the names and addresses of contractors, stating whether their shops are inside or outside the establishment and whether or not they work for this establishment exclusively.

(K) REMARKS.

.....
.....
.....

Foregoing data furnished, ..., 191 , to special agent .....

SPECIAL INQUIRIES.

1. Amount of returns and allowances during year..... $.....
2. Estimated loss from returns and allowances during year..... .....
3. Amount of cancellations during year..... .....
4. Estimated loss from cancellations during year..... .....
5. Percentage of suits and overcoats sold at—
   $8 and under .....
   $8 to $15. .....
   $15 and over. .....
6. Method and frequency of inventories of raw materials? .....
   .....
   .....
7. Method and frequency of inventories of finished goods .....
   .....
   .....
8. System of apportioning overhead; (a) Direct labor method? .....
   (b) Prime cost method? ..... (c) If other method is used give as much information about it as can be ascertained.....
   .....
   .....
9. Other accounting conditions which would indicate efficiency or the lack of it in the management .....
   .....
   .....
   .....
10. Has the establishment contractors for fabric examining? .....; sponging? .....; making coats? .....; making trousers? .....; making vests? .....
11. Estimated total number of employees of the establishment (shown at J–1) and of its contractors required to make its production during the last busy season, ...

12. Number of seaming machines used when factory is in full operation? .....; per cent bought within last 10 years? .....
13. Fabric cut by shears, electric cutters, band saw, or long knife? .....
    .....
14. Linings cut by shears, electric cutters, band saw, or long knife? .....
    .....
15. Trimmings cut by shears, electric cutters, band saw, or long knife? .....
    .....
16. Is the equipment arranged to the best advantage? .....
    .....
17. Are daylight conditions good, fair, or poor? .....
18. Artificial lighting—arcs, indirect, inverted trough shades, or separate shades for each machine? .....
    .....
    .....
19. Other factory conditions indicating efficiency or the lack of it in the management?
    .....
    .....

Agents of the Bureau of Foreign and Domestic Commerce visited the establishments and requested permission to examine the books of accounts in order to obtain the desired details. Assurance was given that the information would be regarded as confidential and would not be used in such a way that the establishment could be identified. The form of this assurance was as follows:

DEPARTMENT OF COMMERCE,
BUREAU OF FOREIGN AND DOMESTIC COMMERCE,
Washington.

CONFIDENTIAL.

(One copy of this agreement to be retained by the manufacturer and one copy to be forwarded to the Chief of the Bureau.)

The information which has been given to Mr. ———, special agent of the Bureau of Foreign and Domestic Commerce, is furnished with the understanding that the name and address of the establishment will not be written on the schedule; that the information on the schedule will be considered by the Bureau and its special agents as absolutely confidential; that it will not be divulged; and that it will not be published in such a way that the identity of the establishment will be shown.

This information which appears on establishment schedule No. ——— has been obtained from the books and from the officers of the establishment, and, to the best of our knowledge, is correct.

(Special agent's signature) ——— ———
(Manufacturer's signature) ——— ———

Date ———, 191—.

The investigation was aided by the hearty cooperation of the National Association of Clothiers. Mr. Harry D. Kohn, president of the association, at the time of this investigation, sent a letter to every member of the association as follows:

NATIONAL ASSOCIATION OF CLOTHIERS,
13 ASTOR PLACE,
New York, February 18, 1915.

An investigation concerning the manufacture of clothing is now being made by the United States Bureau of Foreign and Domestic Commerce, under the law which authorizes such investigation, with regard to cost of production of dutiable goods.

Men's clothing is now being investigated and special agents are collecting desired data, to obtain the condition of business, various items of expenditure, and net sales of each concern.

The Government furnishes a written guarantee that information furnished will be kept strictly confidential—only percentages and ratios will be published.

The data collected will be arranged in tables, with statements of manufacturers regarding condition of business, to enable Congress to decide concerning the adequacy of the present tariff.

Schedules giving the principal items of cost and net sales will be used and a list of topics will be offered manufacturers to suggest ideas which manufacturers think should be brought to the attention of the Government and to the public.

As president of the Clothiers' Association, I would thank you to cooperate with the department, which gives us an opportunity to express views regarding the tariff and other conditions.

Yours, very truly,

(Signed) HARRY D. KOHN,
President, Clothiers Association of New York.

When this letter was sent out the National Association of Clothiers had 142 members, of whom 72 were in New York City.

The information secured during the investigation was obtained directly from the manufacturers and from their books. No data regarding the cost of production were accepted that the agents did not find recorded on the books of the establishments reporting. From data entered on the establishment schedules the figures were derived which show the various items of the cost of production and also the percentages of profit on net sales and on the capital employed in the business.

The further object of the investigation was to ascertain the details of the cost of manufacturing specified styles of men's ready-made clothing. The following form, called a unit schedule, was prepared for the entry of such data:

CONFIDENTIAL.

UNITED STATES DEPARTMENT OF COMMERCE,

BUREAU OF FOREIGN AND DOMESTIC COMMERCE,

WASHINGTON.

UNIT SCHEDULE—MEN'S CLOTHING.

The data shown on this schedule should be on the basis of prices and the cost of materials and labor during the summer and fall of 1914 for spring goods, and during the winter and spring of 1914–15 for winter goods.

Unit: One.....

A unit schedule should be used for each unit, which may be one or more either two or three piece suits, one or more overcoats, or one or more separate pairs of trousers.

(A) WHOLESALE AND RETAIL PRICES.

Usual original retail price.	Price to jobbers.			Price to retailers.		
	Gross price.	Usual per cent discount.	Net price.	Gross price.	Usual per cent discount.	Net price.
Style A, $.....	$.....	.....	$.....	$.....	.....	$.....
Style B, $.....	.....	.....	.....	.....	.....	.....
Style C, $.....	.....	.....	.....	.....	.....	.....
Style D, $.....	.....	.....	.....	.....	.....	.....
Style E, $.....	.....	.....	.....	.....	.....	.....
Style F, $.....	.....	.....	.....	.....	.....	.....

Secure swatches of fabric for each style.

(B) DESCRIPTIONS OF COATS OR OVERCOATS.

Specifications.	Style A.	Style B.	Style C.	Style D.	Style E.	Style F.
1. Sack, cutaway, Norfolk, dress, or overcoat.....						
2. Single or double breasted.....						
3. Lined, full, half, quarter, or skeleton.....						
4. Outside pockets, number welted.....						
5. Outside pockets, number with flaps.....						
6. Outside pockets, number patch.....						
7. Outside pockets, number bellows.....						
8. Inside pockets, number.....						
9. Sleeves, plain, vent, or cuff.....						
10. Sleeves, basted in or not.....						
11. Edges, plain, stitched or double-stitched.....						
12. Inside seams, piped, plain, or turned in.....						
13. Bottom, felled or stitched.....						
14. Canvas, made by hand or machine.....						
15. Collar, padded by hand or machine.....						
16. Buttonholes, made by hand or machine.....						
17. Method of making, open or closed.....						

(C) DESCRIPTIONS OF TROUSERS.

Specifications.	Style A.	Style B.	Style C.	Style D.	Style E.	Style F.
1. Pockets, number with flaps.....						
2. Pockets (including fob), number without flaps.....						
3. Waistband, separate or grown in.....						
4. Tops, stitched or felled.....						
5. Loops, plain, tunnels or none.....						
6. Crotch, whole or pieced.....						
7. Bottoms, plain or cuff.....						
8. Bottoms, finished or basted only.....						
9. Bottoms, finished by hand or machine.....						
10. Buttonholes, made by hand or machine.....						
11. Top buttons, sewed on by hand or machine.....						
12. Fly buttons, sewed on by hand or machine.....						

(D) DESCRIPTIONS OF VESTS.

Specifications.	Style A.	Style B.	Style C.	Style D.	Style E.	Style F.
1. Single or double breasted.....						
2. Collar, with or none.....						
3. Back, lined or skeleton.....						
4. Outside pockets, number welted.....						
5. Outside pockets, number with flaps.....						
6. Outside pockets, number patch.....						
7. Inside pockets, number.....						
8. Edges, plain, stitched, or double stitched.....						
9. Buttonholes, made by hand or machine.....						

(E) MATERIALS USED IN UNIT.

Specifications.	Style A.	Style B.	Style C.	Style D.	Style E.	Style F.
1. Fabric (outer cloth), commercial name						
2. Fabric, per cent of wool						
3. Fabric, weight per yard						
4. Fabric, width before shrinking						
5. Fabric, yards used, before shrinking						
6. Fabric, price per yard	$	$	$	$	$	$
7. Fabric, gross cost of quantity used	$	$	$	$	$	$
8. Fabric, London or steam shrunk						
9. Body lining, commercial name						
10. Body lining, per cent of wool						
11. Body lining, width						
12. Body lining, yards used						
13. Body lining, price per yard	$	$	$	$	$	$
14. Body lining, gross cost of quantity used	$	$	$	$	$	$
15. Sleeve lining, commercial name						
16. Sleeve lining, cotton, satin, or silk						
17. Sleeve lining, width						
18. Sleeve lining, yards used						
19. Sleeve lining, price per yard	$	$	$	$	$	$
20. Sleeve lining, gross cost of quantity used	$	$	$	$	$	$

(F) COST OF MATERIALS IN UNIT.

Items.	Style A.	Style B.	Style C.	Style D.	Style E.	Style F.
1. Fabric, usual per cent of discount taken						
2. Fabric, gross cost (E–7)	$	$	$	$	$	$
3. Fabric, discount, amount	$	$	$	$	$	$
4. Fabric, net cost	$	$	$	$	$	$
5. Body lining, usual per cent of discount taken						
6. Body lining, gross cost (E–14)	$	$	$	$	$	$
7. Body lining, discount, amount	$	$	$	$	$	$
8. Body lining, net cost	$	$	$	$	$	$
9. Sleeve lining, usual per cent of discount taken						
10. Sleeve lining, gross cost (E–20)	$	$	$	$	$	$
11. Sleeve lining, discount amount	$	$	$	$	$	$
12. Sleeve lining, net cost	$	$	$	$	$	$
13. Overcoat collar, if silk velvet, net cost	$	$	$	$	$	$
14. Trimmings, all other, net cost	$	$	$	$	$	$
15. Freight, if included in overhead, enter here; deduct at H–5	$	$	$	$	$	$
16. Total net cost of materials	$	$	$	$	$	$
17. Royalty expense	$	$	$	$	$	$

(G) DIRECT LABOR COST OF UNIT.

Operations.	Style A.	Style B.	Style C.	Style D.	Style E.	Style F.
1. Suit, overcoat, or separate trousers						
2. Fabric, paid contractor for	$	$	$	$	$	$
3. Fabric, examining	$	$	$	$	$	$
4. Fabric, sponging	$	$	$	$	$	$
5. Fabric, linings, trimmings, cutting and trimming	$	$	$	$	$	$
6. Total, examining, sponging, cutting, and trimming	$	$	$	$	$	$
7. Coat or overcoat, paid contractor	$	$	$	$	$	$
8. Coat or overcoat, machine operating	$	$	$	$	$	$
9. Coat or overcoat, pressing	$	$	$	$	$	$
10. Coat or overcoat, basting	$	$	$	$	$	$
11. Coat or overcoat, home finishing	$	$	$	$	$	$
12. Coat or overcoat, othan hand work	$	$	$	$	$	$
13. Coat or overcoat, other direct labor	$	$	$	$	$	$
14. Coat or overcoat, total for making	$	$	$	$	$	$
15. Trousers, paid contractor	$	$	$	$	$	$
16. Trousers, machine operating	$	$	$	$	$	$
17. Trousers, pressing	$	$	$	$	$	$
18. Trousers, basting	$	$	$	$	$	$
19. Trousers, home finishing	$	$	$	$	$	$
20. Trousers, other hand work	$	$	$	$	$	$
21. Trousers, other direct labor	$	$	$	$	$	$
22. Trousers, total for making	$	$	$	$	$	$
23. Vest, paid contractor	$	$	$	$	$	$
24. Vest, machine operating	$	$	$	$	$	$
25. Vest, pressing	$	$	$	$	$	$
26. Vest, basting	$	$	$	$	$	$
27. Vest, home finishing	$	$	$	$	$	$
28. Vest, other hand work	$	$	$	$	$	$
29. Vest, other direct labor	$	$	$	$	$	$
30. Vest, total for making	$	$	$	$	$	$

G–2. After "for" enter examining or sponging or both.
G–3 to 5 and 8 to 13. Enter only cost of labor for which contractor was not paid.
G–13. Including tailors, shapers, ticket sewers, basting pullers, cleaners, garment examiners, and bushelers, but not bushelers for retail store and not indirect labor shown at C on the establishment schedule.
G–16 to 21 and 24 to 29. Enter only cost of labor for which contractor was not paid.
G–21 and 29. Including tailors, shapers, ticket sewers, basting pullers, cleaners, garment examiners, and bushelers, but not bushelers for retail store and not indirect labor shown at C on the establishment schedule.

(H) TOTAL NET COST OF UNIT.

Summary.	Style A.	Style B.	Style C.	Style D.	Style E.	Style F.
1. Materials (F–16)	$	$	$	$	$	$
2. Paid contractors (G–2, 7, 15, and 23)	$	$	$	$	$	$
3. Other direct labor (G–6, 14, 22, and 30 less G–2, 7, 15, and 23)	$	$	$	$	$	$
4. Royalty expense (F–17)	$	$	$	$	$	$
5. Overhead charges, as computed by establishment, not including freight (F–15) or royalty (F–17)	$	$	$	$	$	$
6. Total net cost	$	$	$	$	$	$

Each unit was one suit, overcoat, or separate pair of trousers of a particular style. The amount paid for each kind of material used was ascertained; also the amount paid for each direct labor operation. These items the manufacturers could easily give. What the trade commonly calls "overhead" was found by computation, according to the "dual method" explained on page 223, in a section of this report headed "Simplified Cost Accounting."

Many manufacturers were interviewed by special agents of the Bureau of Foreign and Domestic Commerce in regard to subjects relating to the men's ready-made clothing industry that were not included in either the establishment schedule or the unit schedule, and much valuable information regarding general trade conditions was thus obtained.

The statistics regarding wages and hours of labor which appear in this report are reproduced from a bulletin issued by the Bureau of Labor Statistics[a] reporting an investigation made in the year 1913.

A contemplated investigation by the Bureau of Foreign and Domestic Commerce of the cost of production of men's ready-made clothing in European countries was prevented by the European war.

[a] Bulletin of the United States Bureau of Labor Statistics, whole number 161.

SUMMARY.

CAPITAL, NET SALES, AND TURNOVER.

The 64 establishments for which data were obtained reported capital employed in business amounting to $32,850,950, or an average of $513,296 per establishment.

In tabulating the data the establishments were divided into 18 groups, according to method of manufacture, usual factory price of product, location, and amount of net sales. These 18 groups are as follows:

Group I. Twelve establishments having no operating contracted.

Group II. Thirty establishments having part of operating contracted.

Group III. Twenty-two establishments having all operating contracted.

Of these, 12 establishments which had no operating contracted, reported capital employed in business amounting to $5,040,853, or an average of $420,071 per establishment. Thirty establishments, which had part of operating contracted, reported $20,515,075, or $683,836 per establishment. Twenty-two establishments, which had all operating contracted, reported $7,295,022, or an average of $331,592.

The establishments are further divided into groups according to the prices at which the principal part of their product is sold. Group IV includes 8 establishments manufacturing suits and overcoats with a factory price under $8; Group V, 37 establishments manufacturing suits and overcoats with a factory price of at least $8 but under $15; Group VI, 11 establishments manufacturing suits and overcoats with a factory price of $15 and over, and Group VII, 8 establishments manufacturing separate trousers, etc.

The establishments are also grouped according to locality. Group VIII includes 4 establishments in Chicago; Group IX, 7 establishments in Philadelphia; Group X, 4 establishments in Cleveland and Milwaukee; Group XI, 7 establishments in Rochester; Group XII, 6 establishments in Baltimore; Group XIII, 30 establishments in New York City, and Group XIV, 6 establishments in Cincinnati.

The last 4 groups are divided according to the amount of net sales. Group XV includes 27 establishments with net sales under $500,000; Group XVI, 14 establishments with net sales of $500,000 and under $1,000,000; Group XVII, 14 establishments with net sales of $1,000,000 and under $2,000,000; Group XVIII, 9 establishments with net sales of $2,000,000 or over.

The average percentages of manufacturing profit and final profit of all the 64 establishments reporting were as follows: Per cent of manufacturing profit on capital employed in business, 11.14; on net sales, 5.46; per cent of final profit on capital employed in business,

10.47; on net sales, 5.14. Of the total number of establishments reporting, 6 had manufacturing losses and 7 had final losses; 36 earned 10 per cent or more of manufacturing profit, and 34 earned 10 per cent or more of final profit on capital employed in business.

The percentage of manufacturing profit on the investment and on the net sales is shown by groups in the following table:

TABLE 7.—PERCENTAGE OF MANUFACTURING PROFIT, BY GROUPS AND COMBINATIONS OF GROUPS OF ESTABLISHMENTS.

Establishments.	Groups.	Number of establishments.	Manufacturing profit on—	
			Capital employed.	Net sales.
			Per cent.	*Per cent.*
All establishments reporting		64	11.14	5.46
Establishments having—				
No operating contracted	I	12	12.56	5.66
Part of operating contracted	II	30	9.79	5.22
All operating contracted	III	22	13.94	5.89
Establishments manufacturing suits and overcoats with factory price—				
Under $8	IV	8	15.79	6.07
$8 and under $15	V	37	12.65	6.19
$15 and over	VI	11	5.13	2.81
Establishments manufacturing separate trousers, etc	VII	8	9.30	4.37
Establishments located in—				
Chicago	VIII	4	13.45	7.45
Philadelphia	IX	7	14.22	6.52
Cleveland and Milwaukee	X	4	9.21	6.32
Rochester	XI	7	10.03	5.18
Baltimore	XII	6	9.07	5.06
New York City	XIII	30	12.59	5.01
Cincinnati	XIV	6	7.33	3.42
Establishments with net sales of—				
Under $500,000	XV	27	10.90	4.74
$500,000 and under $1,000,000	XVI	14	11.87	4.11
$1,000,000 and under $2,000,000	XVII	14	9.75	4.67
$2,000,000 or over	XVIII	9	11.90	6.73

The profit on capital employed in business was in all instances very much larger than the profit on net sales, in most cases being over twice as large. Establishments with net sales of $2,000,000 or over show a higher percentage of manufacturing profit both on capital employed in business and on net sales than do establishments with smaller amounts of net sales.

For the 64 establishments concerning which information was secured there was a turnover of more than twice the amount of capital employed in business.

The salaries of active officers and the drawing accounts of partners were included in the cost of production before profits were figured. Likewise, in the case of an individual owner of an establishment, the costs include the estimated amount he would have to pay an employee for service such as he himself performed. Before profits were figured, all expenses for selling were included in the cost of production. Furthermore, depreciation was added as an expense before final profits and losses were computed. It was calculated on the inventoried value of the machinery and fixtures at the uniform rate of 8 per cent for all establishments. While many establishments kept no depreciation account on their books and did not take it into consideration in figuring profits or losses, allowance was made in each case nevertheless for depreciation.

COST AND PROFIT, BY ESTABLISHMENTS.

The data furnished by the 64 establishments that reported show that their average net sales during their last business year were $1,046,061; average manufacturing profit, $57,170; average final profit, $53,762.

The manufacturing profit, based on net sales, shows a wide variation in the different establishments. Of the 64 establishments 58 show a manufacturing profit ranging from 12.78 per cent to 0.04 per cent, and 6 establishments show a manufacturing loss ranging from 0.27 per cent to 1.72 per cent.

Of the 58 establishments showing a manufacturing profit on net sales, 2 earned more than 10 per cent; 31 more than 5 but less than 10 per cent; 24 more than 1 but less than 5 per cent; and 1 less than 1 per cent. Three of the establishments showing losses had net sales of less than $500,000.

Table 8 shows, by groups, percentages of cost based on the total manufacturing and selling expense of the establishments.

TABLE 8.—PERCENTAGES OF AVERAGE COSTS, BY SPECIFIED ITEMS, BASED ON THE TOTAL MANUFACTURING AND SELLING EXPENSE, BY GROUPS OF ESTABLISHMENTS.

Establishments.	Groups.	Number of establishments.	Per cent of total manufacturing and selling expense.					
			Raw material.	Direct labor.	Indirect labor.	Factory expense.	Administrative expense.	Selling expense.
All establishments reporting data		64	52.39	29.29	3.97	2.41	3.49	8.45
Establishments having—								
No operating contracted	I	12	50.89	28.05	4.20	2.91	3.75	10.20
Part operating contracted	II	30	50.91	29.92	4.46	2.51	3.58	8.62
All operating contracted	III	22	56.75	28.68	2.73	1.84	3.11	6.89
Establishments with factory price of—								
Under $8	IV	8	58.73	28.16	2.56	1.76	3.98	4.81
$8 and under $15	V	37	52.88	28.61	3.99	2.33	3.46	8.73
$15 and over	VI	11	46.68	33.70	4.56	2.83	3.37	8.86
Establishments manufacturing separate trousers, etc	VII	8	55.87	25.74	3.79	2.73	3.60	8.27
Establishments located in—								
Chicago	VIII	4	47.37	28.95	6.46	3.31	3.65	10.26
Philadelphia	IX	7	54.15	26.83	3.34	1.94	4.63	9.11
Cleveland and Milwaukee	X	4	53.48	20.88	7.66	3.20	3.83	10.95
Rochester	XI	7	51.24	32.48	3.15	2.07	2.66	8.40
Baltimore	XII	6	51.89	29.91	2.84	2.36	3.82	9.18
New York City	XIII	30	54.50	29.84	3.13	2.17	3.25	7.11
Cincinnati	XIV	6	52.32	29.81	3.51	2.04	4.92	7.40
Establishments with net sales of—								
Under $500,000	XV	27	53.23	28.19	3.33	2.49	4.61	8.15
$500,000 and under $1,000,000	XVI	14	52.70	30.20	3.89	2.33	3.78	7.10
$1,000,000 and under $2,000,000	XVII	14	50.94	30.47	3.77	2.44	3.34	9.04
$2,000,000 and over	XVIII	9	53.08	28.46	4.36	2.38	3.15	8.57

The variation in the items of cost may be due to several causes: (1) Quality of materials used; (2) waste and loss of materials; (3) special prices; (4) discounts; (5) other items of cost bearing a higher or lower relative proportion to the total cost.

It does not follow that because one group or establishment had a higher proportion of expenditure for direct labor than other groups or establishments, it had lower profits. Of the 10 establishments showing the highest manufacturing profit, 3 had a higher percentage

of expense for direct labor than the average for all establishments and 7 a lower percentage; and of the 6 establishments showing a manufacturing loss, 4 had a higher percentage of expense for direct labor and 2 a lower percentage.

It should not be assumed that an establishment whose proportion of expenditure for labor was lower than that of other establishments, paid less to its employees than did the others. On the contrary, the earnings of individual employees might even be greater in the establishment with a low percentage of labor cost, because (a) the employees were more skilled than ordinary employees; (b) better superintendence or superior shop arrangements enabled them to turn out a larger product per worker than could be done by workers in factories less efficiently managed; (c) more expensive materials were used in the goods manufactured; (d) overhead expenses were relatively high.

The percentages for indirect labor, factory expense, and administrative expense in Groups I to III, decrease in importance as the operating contracted increases in amount, except that indirect labor is slightly higher in Group II than in Group I; in Groups IV to VII, they increase in importance as the factory price of the product rises, with the exception of administrative expense, in which case they decrease; in Groups XV to XVIII, the percentages for indirect labor show a tendency to increase and those for factory expense and administrative expense show a tendency to decrease as the amount of sales increases.

COST AND PROFIT, BY SPECIFIED UNITS.

Data regarding cost of production of specific styles of men's clothing were obtained from a majority of the manufacturers who furnished information for the establishment schedule. The cost of production of 144 styles of three-piece suits was reported by 43 establishments; of 48 styles of overcoats, by 26 establishments; of 18 styles of separate trousers, by 6 establishments.

All manufacturers, even those that are most unsystematic in cost accounting, are able to state the cost of direct labor on the unit, because practically all direct-labor operations except cutting are performed by pieceworkers. Manufacturers also can easily tell the quantity and cost of each kind of material that is used in making a unit.

The overhead charges on all units specified in this report were computed, according to a uniform method, on the basis of the overhead expenses of the establishment during its last business year, as shown by the establishment schedule.

Some establishments have such crude cost-finding methods that they do not know even approximately their profit or loss on certain styles. Such unsystematic establishments may continue for a long time to sell particular styles of garments at a loss without knowing it. Some establishments, however, knowing accurately what a certain style costs, will sell it at a small margin of profit, or even at a loss, for the purpose of attracting custom to more profitable styles. An establishment may also find it necessary to carry a complete line of styles in order to meet the demand of its customers and hold its trade, and may consider it good business policy to sell, at or below

cost, old or standard styles to customers who will buy high-priced goods on which a profit is realized.

The amounts of profit varied considerably on units of different grades, and even on units of the same grade, and some were sold at a loss. Of 210 units reported, 53, or 25.24 per cent, were sold at a loss. Variations in the percentages of profit on high, medium, and low priced clothing appear in the following table:

TABLE 9.—PERCENTAGES OF AVERAGE MANUFACTURING PROFITS ON LOW, MEDIUM, AND HIGH GRADE GARMENTS, BASED ON AVERAGE NET PRICE PER GARMENT.

Garments.	Low grade, under $8.		Medium grade, $8 and under $15.		High grade. $15 and over.	
	Number of units.	Per cent of profit.	Number of units.	Per cent of profit.	Number of units.	Per cent of profit.
Suits	18	0.151	83	3.203	43	6.724
Overcoats	7	4.570	31	5.783	10	3.633
Trousers	[a] 11	[a] 5.781	.....	.....	[b] 7	[b] 6.721

[a] Under $2.75.

[b] Medium and high grade, $2.75 and over.

SELLING METHODS.

Data regarding the selling cost and selling methods were obtained from 64 establishments. Of the total sales of these establishments 98.21 per cent went to retailers and 1.29 per cent to jobbers; 0.21 per cent was sold by mail order and 0.08 per cent by tailoring-to-the-trade, and 0.21 per cent was exported.

While there is to a certain extent a uniform scale of discounts and time and dating allowances throughout the industry, yet the scale is not used by all manufacturers. A great deal depends upon the class of trade served and on the character, reputation, and business methods of the manufacturing establishment. Usually, however, the terms to retailers in the clothing trade are 7 per cent, 10 days; 6 per cent, 30 days; and 5 per cent, 60 days, with 6 per cent per annum for anticipation. These terms may be said to be fairly uniform, but the class of merchandise handled, reputation of the house, importance of the account and other conditions enter into the terms of discount, dating, etc.

Of the 64 establishments reporting, 14 are national advertisers and 50 are limited advertisers. The total selling expense of the 14 establishments that advertise nationally is 9.41 per cent, as compared with a total selling expense of 6.42 per cent for the 50 establishments that do not advertise extensively. The 14 national advertisers also show a higher percentage of manufacturing and final profit than the 50 establishments doing limited advertising.

Of the 64 establishments reporting, the 12 establishments that had no operating contracted had a total selling expense of 9.76 per cent, the 30 establishments with part of operating contracted, 8.09 per cent, and the 22 establishments that had all operating contracted had a total selling expense of 6.39 per cent. The lower selling expense of the establishments that have all operating contracted is due to the fact that establishments of this description manufacture low-grade clothing, which does not require high-priced salesmen, extensive advertising, and other heavy selling expenses to put it on the market.

Manufacturers of men's factory-made clothing suffer from many trade abuses, which are the cause of many uncertainties and losses affecting the whole industry. The principal evils in the industry, with which the manufacturers seem unable to cope, are as follows: Cancellations, returns and allowances, revisions, indiscriminate credit, extra discounts and dating, concessions to secure new accounts, consignment shipments, memorandum orders, and long future delivery.

Data concerning returns and allowances and cancellations were secured from 22 establishments. Returns and allowances and cancellations amounted to 23.03 per cent of total net sales, returns and allowances being 7.59 per cent and cancellations 15.44 per cent. The estimated losses due to these causes, as based on net sales, averaged 1.57 per cent on returns and allowances and 1.29 per cent on cancellations, making a total estimated loss of 2.86 per cent.

EARNINGS OF EMPLOYEES.

The following table shows the average rate of earnings per hour by employees in factories for the manufacture of men's clothing in the seven cities in which the production is largest. The data in this table were derived from a report of the Bureau of Labor Statistics, Department of Labor,[a] which shows the results of an investigation made in 1913.

TABLE 10.—AVERAGE EARNINGS PER HOUR OF EMPLOYEES IN SPECIFIED OCCUPATIONS, 1913.

Occupations.	Male.	Female.	Occupations.	Male.	Female.
Cutters, cloth:			Pressers:		
Hand	$0.4355	.....	Coat	$0.2878	.....
Machine	.4512	.....	Pants	.3104	.....
Fitters or trimmers, coat	.3450	.....	Vest	.3360	.....
Basters:			All	.2959	.....
Coat	.2540	$0.1843	Hand sewers:		
Pants	.....	.1659	Coat	.2564	$0.1776
Vest	.....	.2041	Pants	.....	.1633
All	.....	.1857	Vest	.....	.1921
Operators:			All	.....	.1767
Coat	.2948	.1989	Examiners, shop and stock room	.2978	.....
Pants	.3253	.2019	Bushelers and tailors	.2683	.....
Vest	.3627	.2364			
All	.3090	.2065			

The average hours of labor in 1913 of nearly all occupations were between 52 and 53 per week. For cutters the average was about 49 hours per week.

In this industry there has been, during recent years, a considerable increase of earnings per hour and a noticeable reduction in the hours worked per week. Taking the average earnings per hour and the average working hours per week in 1913 as the base, or 100 per cent, the average earnings per hour in 1911 were 86 per cent and the average working hours per week in that year were 105.6 per cent.

IMPORTS.

The imports of men's clothing into the United States are almost negligible and are generally English overcoats, novelty garments, like the Balmacaan and golfing and motoring clothes. No sack suits

[a] Bulletin of the United States Bureau of Labor Statistics. Whole No. 161.

are imported. The people in this country who demand English clothes are few. They reside usually in the seaport cities, New York, Boston, etc., and are in touch with England either socially or commercially. No complaint about foreign competition was made by any manufacturer interviewed during this investigation. The American people, except a very few, prefer American styles, and are satisfied that the workmanship on ready-made clothing is much better in this country than in any other. The improvement in the styles and workmanship of ready-made clothing in the United States has led to an enormous increase in the production during the last 20 years.

The completeness of the factory equipment, the thoroughness of the factory organization, and the efficiency of the working force, which are noticeable in many establishments for making men's clothing in this country, are not even approached in other countries. The ready-made clothing manufactured in Europe is nearly all of low-grade cheap varieties, and is almost invariably made in small factories, in shops, or in the homes of the workers.

During the fiscal years 1898 to 1909, while the Dingley Act was in force, the computed ad valorem rate of duty on wearing apparel composed wholly or in part of wool, worsted, etc., varied from 73.10 to 78.49 per cent, and during the fiscal years 1909 to 1913, while the Payne-Aldrich Act was in force, the computed ad valorem rate of duty varied from 74.14 to 77.09 per cent. By the Simmons-Underwood Act the rate was reduced to 35 per cent ad valorem.

The statistics of imports do not separately specify the importations of men's clothing, but the imports for consumption of wearing apparel of all kinds, composed wholly or in part of wool, worsted, etc., amounted, in the fiscal year ending June 30, 1910, to $1,353,074; 1911, $1,794,081; 1912, $1,608,156; 1913, $1,481,068; 1914, $1,633,700; 1915, $1,317,649. During the period from July 1, 1913, to December 31, 1913, under the old tariff the imports were $901,380; during the period from January 1, 1914, to June 30, 1914, under the new tariff, they were $732,320. The production of men's and boys' clothing, as reported by the Census of Manufactures, was $485,677,493 in 1909.

EXPORTS.

The exports of men's clothing are insignificant as compared with the production in the United States. During the fiscal year 1914 the exports of woolen wearing apparel of all kinds amounted to $2,148,235; of cotton wearing apparel of all kinds, except corsets, hosiery, and other knit goods, $5,999,887. Most of the exports of clothing before the war began in Europe went to North American countries, principally Canada and Mexico. Ready-to-wear clothing is not commonly worn in Europe except in the cheaper grades. American-made clothing for men was introduced in London, England, about 1907 or 1908, and small quantities have been sold in other European cities.

Though South America offers some field for the exportation of clothing, Europe, South Africa, and Australia offer the greatest opportunity. A comparatively small proportion of the population in South America wear well-made clothing. The South American trade demands long selling terms and liberal credits, which American

manufacturers have generally been unwilling to extend. High tariffs have been an obstacle to South American trade, but it is believed that a market can be built up for two-piece suits made in the United States.

American manufacturers of clothing have made little effort to develop foreign trade except in Canada and, to a limited extent, in Mexico. They have been too much engrossed in the home market. What little clothing they have exported has usually been sold through a buyer or agent resident in this country. They have not catered to the needs of the foreign market nor considered the styles of clothing that are preferred by people in foreign countries. To extend their foreign trade, American manufacturers must study foreign conditions, cater to foreign needs and prejudices, and send out salesmen who can speak foreign languages.

CHAPTER I.

CAPITAL, NET SALES, AND TURNOVER.

Data regarding the cost of production of men's ready-made clothing were obtained from 64 establishments, the figures covering their last business year. The establishments were classified into 18 groups, according to their methods of manufacture (amount of contracting), factory prices of products, location of factories, and amount of net sales.

MANUFACTURING AND FINAL PROFIT.

Table 11, which follows, shows the amount of capital employed in business by each group of the 64 establishments reporting, at the beginning of its latest business period, the net sales and their ratio to capital, the manufacturing profit, and the final profit. Good will, reported by only 4 establishments, is not included in the table:

TABLE 11.—CAPITAL EMPLOYED IN BUSINESS, NET SALES, AND MANUFACTURING AND FINAL PROFIT, BY GROUPS OF ESTABLISHMENTS.

Classification.	Groups.	Number of establishments.	Capital employed in business.	Net sales.		Manufacturing profit.	Final profit.
				Amount.	Ratio to capital.		
All establishments reporting	.....	64	$32,850,950	$66,947,954	2.04	$3,658,893	$3,440,808
Establishments having—							
No operating contracted	I	12	5,040,853	11,185,364	2.22	633,382	523,089
Part of operating contracted	II	30	20,515,075	38,507,718	1.88	2,008,877	1,968,740
All operating contracted	III	22	7,295,022	17,254,872	2.37	1,016,634	948,979
Establishments manufacturing—							
Suits and overcoats at factory price under $8	IV	8	1,822,357	4,741,851	2.60	287,678	249,780
Suits and overcoats at factory price, $8 and under $15	V	37	22,422,566	45,818,961	2.04	2,837,492	2,660,496
Suits and overcoats at factory price, $15 and over	VI	11	6,389,741	11,668,956	1.83	327,499	329,417
Separate trousers, etc	VII	8	2,216,286	4,718,186	2.13	206,224	201,115
Establishments located in—							
Chicago	VIII	4	5,323,036	9,612,799	1.81	716,026	730,987
Philadelphia	IX	7	1,378,355	3,005,556	2.18	195,970	174,077
Cleveland and Milwaukee	X	4	3,756,576	5,473,154	1.46	345,920	353,192
Rochester	XI	7	5,681,484	11,003,401	1.94	569,864	579,789
Baltimore	XII	6	4,676,822	8,376,803	1.79	424,034	436,953
New York City	XIII	30	9,989,213	25,102,054	2.51	1,257,325	1,067,3 3
Cincinnati	XIV	6	2,045,464	4,374,187	2.14	149,745	98,447
Establishments with net sales—							
Under $500,000	XV	27	3,963,065	9,101,587	2.30	431,812	376,209
$500,000 and under $1,000,000	XVI	14	3,265,630	9,443,897	2.89	387,741	336,831
$1,000,000 and under $2,000,000	XVII	14	9,723,025	20,288,752	2.09	947,809	770,832
$2,000,000 and over	XVIII	9	15,899,230	28,113,718	1.77	1,891,531	1,956,936

The manufacturing profit shown by groups in the foregoing table was found by adding the cost of goods produced, the selling expense, and the cost of finished goods purchased, and from this sum deducting any increase in the stock of goods during the year, or adding to this sum any decrease in the stock of goods. This deduction or addition gave the cost to the manufacturer of the goods sold, which figures subtracted from the net sales gave the manufacturing profit.

What is called the final profit was found by adding to the manufacturing profit the miscellaneous income from real estate, bank balances or investments outside the manufacturing business, and

deducting income from miscellaneous sources, interest on current loans, and depreciation on machinery and fixtures. No item of expense for investments outside the manufacturing business was reported. Of the 64 establishments, 19 reported no depreciation, but depreciation was calculated on the value of machinery and fixtures of all establishments at the uniform rate of 8 per cent.

Salaries of active officers and the drawing accounts of partners were included in the cost of production before profits or losses were figured. Likewise, in case of an individual owner of an establishment, the costs included the estimated amount he would have to pay an employee for service such as he himself performed. Before profits or losses were figured, all expenses for selling were included in the cost of production.

As the greater number of the 64 establishments from which data were secured rented their factories, those which did own their buildings were put on a rental basis. In estimating the rent where the building was owned, the items for depreciation, repairs, fire insurance, and taxes relating to buildings were canceled. From the value of the building, as shown on the books of the company, the reserve for depreciation on buildings and the cost of additions and betterments during the year were deducted. On the remainder 10 per cent was charged against cost of manufacture as rent.

PERCENTAGES OF PROFIT ON CAPITAL AND NET SALES.

The percentages of manufacturing profit and final profit, based both on capital employed in business and on net sales, are shown in the following table, by groups of establishments:

TABLE 12.—AVERAGE PERCENTAGES OF MANUFACTURING PROFIT AND FINAL PROFIT ON CAPITAL EMPLOYED IN BUSINESS AND ON NET SALES, BY GROUPS OF ESTABLISHMENTS.

Classification.	Groups.	Number of establishments.	Per cent of manufacturing profit on—		Per cent of final profit on—	
			Capital employed in business.	Net sales.	Capital employed in business.	Net sales.
All establishments reporting		64	11.14	5.46	10.47	5.14
Establishments having—						
No operating contracted	I	12	12.56	5.66	10.38	4.67
Part of operating contracted	II	30	9.79	5.22	9.60	5.11
All operating contracted	III	22	13.94	5.89	13.01	5.50
Establishments manufacturing—						
Suits and overcoats at factory price under $8	IV	8	15.79	6.07	13.71	5.27
Suits and overcoats at factory price, $8 and under $15	V	37	12.65	6.19	11.87	5.81
Suits and overcoats at factory price, $15 and over	VI	11	5.13	2.81	5.16	2.82
Separate trousers, etc	VII	8	9.30	4.37	9.07	4.26
Establishments located in—						
Chicago	VIII	4	13.45	7.45	13.73	7.60
Philadelphia	IX	7	14.22	6.52	12.63	5.79
Cleveland and Milwaukee	X	4	9.21	6.32	9.40	6.45
Rochester	XI	7	10.03	5.18	10.20	5.27
Baltimore	XII	6	9.07	5.06	9.34	5.22
New York City	XIII	30	12.59	5.01	10.69	4.25
Cincinnati	XIV	6	7.32	3.42	4.81	2.25
Establishments with net sales—						
Under $500,000	XV	27	10.90	4.74	9.49	4.13
$500,000 and under $1,000,000	XVI	14	11.87	4.11	10.31	3.57
$1,000,000 and under $2,000,000	XVII	14	9.75	4.67	7.93	3.80
$2,000,000 or over	XVIII	9	11.90	6.73	12.31	6.96

TURNOVER OF CAPITAL.

The percentages of profit on capital employed in the business were much larger than those on net sales because, in this industry the net sales each year are considerably greater than the capital employed, and the latter can therefore be turned over several times during the year. Thus for the 64 establishments reporting, the manufacturing profit on the capital employed was 11.14 per cent and on the net sales, 5.46 per cent, the former being 2.04 times the latter, as shown in Table 11. The same relation existed between the final profit on the capital employed, 10.47 per cent, and on the net sales, 5.14 per cent.

As the capital turnover varies in different establishments, the relation between the profits based on capital employed and the profit on net sales varies accordingly, as may be seen in the preceding table. The profits based on net sales are fully discussed in Chapter II, Cost and Profit by Establishments.

Table 13 shows for each of the 64 establishments, as well as for each of the first three groups, the manufacturing profit and final profit based on capital employed in business and on net sales.

TABLE 13.—PERCENTAGE OF MANUFACTURING PROFIT AND FINAL PROFIT ON CAPITAL EMPLOYED IN BUSINESS AND ON NET SALES.

Establishments having—	Establishment No.—	Per cent of manufacturing profit on—		Per cent of final profit on—	
		Capital employed in business.	Net sales.	Capital employed in business.	Net sales.
No operating contracted (Group I)	1	15.38	12.78	13.48	11.20
	2	22.78	4.95	20.47	4.45
	3	13.20	6.79	12.93	6.65
	4	23.65	6.50	21.68	5.96
	5	21.07	5.24	19.04	4.74
	6	20.69	4.61	16.08	3.58
	7	2.64	1.92	4.32	3.13
	8	8.36	3.34	5.48	2.19
	9	12.13	7.15	11.00	6.48
	10	3.23	1.52	a 6.89	a 3.23
	11	8.53	5.87	8.34	5.74
	12	39.82	8.83	38.82	8.61
Total		12.56	5.66	10.38	4.67
Part of operating contracted (Group II)	13	5.94	2.01	1.44	.49
	14	9.02	5.20	7.49	4.32
	15	a .73	a .40	a 2.13	a 1.15
	16	3.45	2.23	3.16	2.04
	17	11.03	5.03	10.98	5.01
	18	a 1.99	a 1.10	a 2.59	a 1.43
	19	29.40	6.09	28.97	6.00
	20	13.26	5.79	11.39	4.97
	21	6.09	3.07	5.07	2.56
	22	24.45	6.89	22.53	6.35
	23	12.96	3.59	12.21	3.38
	24	7.96	3.25	7.07	2.89
	25	30.29	8.28	29.93	8.18
	26	16.62	4.50	13.62	3.69
	27	15.09	6.51	10.43	4.50
	28	25.70	3.41	20.92	2.78
	29	a 1.09	a .54	a 2.10	a 1.03
	30	8.46	3.11	5.06	1.86
	31	3.33	1.07	a 4.57	a 1.46
	32	13.57	7.33	10.02	5.41

a Loss.

TABLE 13.—PERCENTAGE OF MANUFACTURING PROFIT AND FINAL PROFIT ON CAPITAL EMPLOYED IN BUSINESS AND ON NET SALES—Continued.

Establishments having—	Establishment No. —	Per cent of manufacturing profit on—		Per cent of final profit on—	
		Capital employed in business.	Net sales.	Capital employed in business.	Net sales.
Part of operating contracted (Group II)	33	18.46	6.91	15.65	5.86
	34	5.75	3.74	3.96	2.57
	35	14.80	4.57	11.11	3.43
	36	a 1.40	a .77	4.56	2.56
	37	a .26	a .27	1.36	1.41
	38	8.21	5.41	8.12	5.35
	39	3.87	3.41	6.38	5.62
	40	9.09	6.23	9.78	6.70
	41	12.97	7.68	12.25	7.25
	42	26.91	10.57	26.19	10.29
Total		9.79	5.22	9.60	5.11
All operating contracted (Group III)	43	18.50	5.79	17.64	5.52
	44	a 4.30	a 1.72	a 6.98	a 2.79
	45	16.18	7.04	15.51	6.75
	46	9.28	5.48	7.82	4.62
	47	22.12	4.71	18.40	3.92
	48	8.96	3.80	9.69	4.10
	49	5.90	3.00	3.00	1.52
	50	13.82	6.59	12.34	5.88
	51	16.12	8.19	16.95	8.62
	52	25.89	8.44	22.94	7.48
	53	4.29	2.08	3.06	1.48
	54	.06	.04	a 1.67	a 1.00
	55	27.66	7.20	22.61	5.89
	56	26.03	6.20	25.97	6.19
	57	13.12	3.74	9.31	2.65
	58	21.82	6.40	20.44	5.99
	59	14.96	8.07	13.05	7.04
	60	10.02	7.55	9.93	7.49
	61	4.51	1.30	3.08	.89
	62	38.25	9.57	33.80	8.46
	63	4.17	2.13	4.90	2.50
	64	20.77	8.68	20.58	8.60
Total		13.94	5.89	13.01	5.50

a Loss.

The foregoing table shows that of the 64 establishments from which data were secured, 6 had manufacturing losses and 7 had final losses. The greater number of establishments with final losses was due chiefly to interest charges. The table shows that of the 64 establishments reporting, 36 earned 10 per cent or more of manufacturing profit and 34 earned 10 per cent or more of final profit on capital employed in business, the highest percentage of manufacturing profit being 39.82 and of final profit 38.82 (establishment No. 12).

The fact that an establishment made a very small profit or had a loss may have been due to (a) poor factory management; (b) poor cost-finding system; (c) poor selling methods; (d) too little care in extending credits; (e) lack of sufficient capital; (f) too much withdrawn from the business by the owner, partners, or officers.

PROFITS EARNED BY LARGE AND SMALL ESTABLISHMENTS.

There is a difference of opinion as to whether large or small factories are more efficiently conducted with reference to economy of production. In the larger factories efficiency systems have effected certain economies, but in some of these factories the overhead expenses are disproportionately large.

The establishments in each group shown in the preceding table were arranged in the order of the amounts of net sales, the establishment with the smallest sales being first and the one with the largest last. An examination of the table shows there were no decided differences in the percentages of profit between the smaller and the larger establishments in each group.

The following table shows the average percentage of manufacturing profit on capital employed in business and on net sales, by establishments making men's factory-made clothing in the several centers of manufacture:

TABLE 14.—AVERAGE PERCENTAGE OF MANUFACTURING PROFIT BY ESTABLISHMENTS MAKING MEN'S FACTORY-MADE CLOTHING IN THE SEVERAL CENTERS OF MANUFACTURE.

Establishments in—	Average manufacturing profit on—	
	Capital employed in business.	Net sales.
	Per cent.	*Per cent.*
Chicago, 4 establishments, Group VIII	13.45	7.45
Philadelphia, 7 establishments, Group IX	14.22	6.52
Cleveland and Milwaukee, 4 establishments, Group X	9.21	6.32
Rochester, 7 establishments, Group XI	10.03	5.18
Baltimore, 6 establishments, Group XII	9.07	5.06
New York City, 30 establishments, Group XIII	12.59	5.01
Cincinnati, 6 establishments, Group XIV	7.32	3.42

CHAPTER II.

COST AND PROFIT BY ESTABLISHMENTS.

The schedules used for the collection of data showed the various items of the cost of production. The principal divisions of costs were for raw material, direct labor, indirect labor, factory expense, administrative expense, and selling expense. Each of the divisions, except that for materials, was subdivided into specified items. The salaries of active partners or officers, or the estimated amounts that individual owners would have paid for services that they themselves performed, were entered under indirect labor, administrative expense, or selling expense, according to the character of the services rendered.

In presenting the data secured from the 64 establishments, the actual amounts of their net sales and of their expenses for a year are not shown by individual establishments, because by such figures some establishments might be identified. The net sales, the items of cost, and the profit are shown by percentages, according to establishments, and by both averages and percentages, according to groups.

The 64 establishments were grouped in four different ways: According to the extent contract labor entered into the operations (Groups I to III); according to the grade or quality of clothing manufactured (Groups IV to VIII); according to locality (Groups VIII to XIV); according to the amount of net sales (Groups XV to XVIII).

The terms "manufacturing profit" and "final profit" are explained in the chapter on "Capital, Net Sales, and Turnover," page 47.

COST AND PROFIT BASED ON NET SALES.

From the data derived from the establishment schedules the table that follows shows, by groups of establishments, the average net sales, the average cost of items, and the average profit on net sales per establishment:

TABLE 15.—AVERAGE COST OF GOODS SOLD, BY SPECIFIED ITEMS, AND PROFIT, BY GROUPS OF ESTABLISHMENTS.

Items.	All establishments reporting (64).	Establishments having—			Establishments with factory price of units—			Establishments making separate trousers, etc., Group VII (8).
		No operating contracted, Group I (12).	Part operating contracted, Group II (30).	All operating contracted, Group III (22).	Under $8, Group IV (8).	$8 and under $15, Group V (37).	$15 and over, Group VI (11).	
Net sales	$1,046,061	$632,114	$1,288,591	$784,312	$592,731	$1,238,350	$1,060,814	$589,773
Raw materials	514,542	453,764	613,494	412,759	321,529	610,357	477,102	315,892
Direct labor	287,617	250,125	360,581	206,570	154,178	330,393	344,642	145,641
Indirect labor	39,034	37,483	55,732	19,837	14,039	46,010	46,593	21,448
Factory expense	23,644	25,972	29,735	12,660	9,660	28,849	28,903	11,455
Administrative expense	34,302	33,248	49,198	22,647	21,785	39,976	34,489	20,961
Selling expense	82,982	90,985	103,850	50,156	28,300	100,515	90,594	46,736
Total manufacturing and selling	962,121	891,767	1,205,110	727,329	547,467	1,154,319	1,022,068	565,436
Cost of goods purchased	4,986		5,011	7,672		5,977	20	12,219
Deduct increase in stock of goods								13,660
Add decrease in stock of goods	1,784	12,435	6,507	3,100	9,804	1,365	8,933	
Cost of goods sold	968,891	879,332	1,216,628	738,101	556,771	1,161,661	1,031,041	563,995
Manufacturing profit	77,170	52,782	66,963	46,211	35,960	76,689	29,773	25,778
Interest received	3,994	3,169	6,687	481	540	2,710	13,101	66
Rent equivalent	1,290	2,488	1,672		150	923	4,083	
Miscellaneous income	1,022	188	1,315	1,077	725	714	1,494	2,068
Total additions to manufacturing profit	6,166	5,845	9,674	1,558	1,415	4,347	18,658	2,154
Interest paid on current loans	7,836	11,652	9,142	3,974	5,543	7,386	15,315	1,927
Depreciation on equipment	1,344	2,119	1,682	895	433	1,523	1,962	573
Miscellaneous expense	394	1,265	288	64	176	222	1,207	283
Total deductions from manufacturing profit	9,574	15,036	11,012	4,633	6,152	9,131	18,484	2,783
Final profit	53,762	43,591	65,625	43,136	31,223	71,905	29,947	25,139

TABLE 15.—AVERAGE COST OF GOODS SOLD, BY SPECIFIED ITEMS, AND PROFIT, BY GROUPS OF ESTABLISHMENTS—Continued.

Items.	Establishments located in—							Establishments with net sales of—				
	Chicago, Group VIII (4).	Philadelphia, Group IX (7).	Cleveland and Milwaukee, Group X (4).	Rochester, Group XI (7).	Baltimore, Group XII (6).	New York City, Group XIII (30).	Cincinnati, Group XIV (8).	Under $500,000, Group XV (27).	$500,000 and under $1,000,000, Group XVI (14).	$1,000,000 and under $2,000,000, Group XVII (14).	$2,000,000 and over, Group XVIII (9).
Net sales	$2,403,200	$429,365	$1,368,288	$1,571,914	$1,396,134	$836,735	$729,031	$337,096	$674,564	$1,449,197	$3,123,746
Raw materials	1,090,478	207,961	694,676	755,685	693,461	433,505	339,774	167,747	330,378	702,473	1,549,068
Direct labor	641,980	103,024	271,199	479,601	399,967	237,309	193,579	85,827	189,335	420,210	830,611
Indirect labor	143,296	12,539	98,434	46,383	31,822	21,987	22,819	10,501	24,393	52,023	127,202
Factory expense	78,498	7,439	44,906	30,591	31,062	12,273	13,226	7,858	14,603	33,703	69,422
Administrative expense	80,978	17,794	49,788	39,228	51,062	25,839	31,925	14,547	23,673	46,042	91,840
Selling expense	227,486	35,004	142,235	123,829	122,639	56,529	48,076	25,673	44,517	124,636	249,949
Total manufacturing and selling	2,217,593	384,044	1,298,908	1,474,717	1,336,314	795,476	649,379	315,153	626,899	1,379,087	2,918,092
Cost of goods purchased	5,337	1,102	17,102	4,454	5,106	4,454	24,691	3,540	1,348	14,372	384
Deduct increase in stock of goods	11,989	15,788	10,852	5,106	30,004	2,410	18,621	11,963	4,900		
Add decrease in stock of goods	6,601	401,370	1,283,806	1,490,505	1,325,462	794,824	704,074	321,103	646,868	1,383,496	2,913,576
Cost of goods sold	2,224,194	27,995	86,432	81,409	70,672	44,911	24,957	15,993	27,696	67,701	210,170
Manufacturing profit	179,006										
Interest received	11,313	544	4,419	13,333	7,489	1,163	1,555	359	2,145	8,306	10,358
Rent equivalent	3,581	172	837	4,338	5,133			44		2,408	5,013
Miscellaneous income	1,637	251	1,929	702	1,380	1,066	699	292	760	788	3,981
Total additions to manufacturing profit	16,531	967	7,185	18,373	14,002	2,229	2,254	695	2,905	11,502	19,352
Interest paid on current loans	11,024	3,419	3,083	13,136	8,847	7,175	10,145	2,170	4,920	21,121	8,707
Depreciation on equipment	1,766	572	2,286	2,155	2,920	391	658	456	1,062	2,081	3,265
Misc laneous expense		103		1,664	170	394		128	540	942	113
Total deductions from manufacturing profit	12,790	4,094	5,369	16,955	11,849	8,561	10,803	2,754	6,542	24,144	12,085
Final profit	182,747	24,868	88,298	82,827	72,825	35,579	16,408	13,934	24,059	55,059	217,437

The average net sales of the 64 establishments that reported were $1,046,061; the average cost of goods sold, $988,891; the average manufacturing profit, $57,170; the average final profit, $53,762. These items for all establishments and for the various groups are shown in Table 16, which follows:

TABLE 16.—AVERAGE NET SALES, COST OF GOODS SOLD, AND MANUFACTURING AND FINAL PROFIT, BY GROUPS OF ESTABLISHMENTS.

Establishments.	Number of establishments.	Average net sales.	Average cost of goods sold.	Average manufacturing profit.	Average final profit.
All establishments reporting	64	$1,046,061	$988,891	$57,170	$53,762
Establishments having—					
No operating contracted (Group I)	12	932,114	879,332	52,782	43,591
Part operating contracted (Group II)	30	1,283,591	1,216,628	66,963	65,625
All operating contracted (Group III)	22	784,312	738,101	46,211	43,136
Establishments with factory price of units—					
Under $8 (Group IV)	8	592,731	556,771	35,960	31,223
$8 and under $15 (Group V)	37	1,238,350	1,161,661	76,689	71,905
$15 and over (Group VI)	11	1,060,814	1,031,041	29,773	29,947
Separate trousers, etc. (Group VII)	8	589,773	563,995	25,778	25,139
Establishments located in—					
Chicago (Group VIII)	4	2,403,200	2,224,194	179,006	182,747
Philadelphia (Group IX)	7	429,365	401,370	27,995	24,868
Cleveland and Milwaukee (Group X)	4	1,368,288	1,281,806	86,482	88,298
Rochester (Group XI)	7	1,571,914	1,490,505	81,409	82,827
Baltimore (Group XII)	6	1,396,134	1,325,462	70,672	72,825
New York City (Group XIII)	30	836,735	794,824	41,911	35,579
Cincinnati (Group XIV)	6	729,031	704,074	24,957	16,408
Establishments with net sales of—					
Under $500,000 (Group XV)	27	337,096	321,103	15,993	13,934
$500,000 and under $1,000,000 (Group XVI)	14	674,564	646,868	27,696	24,059
$1,000,000 and under $2,000,000 (Group XVII)	14	1,449,197	1,381,496	67,701	55,059
$2,000,000 and over (Group XVIII)	9	3,123,746	2,913,576	210,170	217,437

Group III, consisting of 22 establishments which have all their operating contracted, shows the smallest average net sales, indicating that the larger establishments generally have their operating performed either entirely in their own shops or only partly in contract shops.

In the grouping according to character and price of product, establishments are assigned to the groups which most nearly represent their product, even though other grades of goods are produced there. Thus, if the factory prices of 75 per cent of the goods produced are under $8 and 25 per cent are $8 or over, the establishment is placed in Group IV, "Under $8;" if 75 per cent are $8 and under $15 and 25 per cent are under $8, it is placed in Group V, "$8 and under $15," and so on.

In the third grouping the establishments were classified according to locality. Reports were obtained from establishments in eight cities. A sufficient number of establishments was not obtained for either Cleveland or Milwaukee to make a group for each of these cities, and for this reason the establishments in the two cities are combined, so as to avoid disclosing the identity of any establishment. While the entire field was not covered in any city, the number of establishments reported may be considered as representative.

In both the manufacturing and the final profit it will be found that the groups containing the larger establishments show greater average profits than the groups containing the smaller establishments. It does not necessarily follow that the larger establishments

earned a greater percentage of profit on net sales or on investment than did the smaller establishments. A more accurate way to measure the amount of profit for any establishment or group is the percentage of profit on net sales or on the investment.

PERCENTAGES OF SPECIFIED ITEMS OF COST.

Table 17, on page 57, shows the percentages, based on net sales, for the various items of cost and for the manufacturing and final profit, by establishments grouped according to the amount of contracting (Groups I to III), factory prices of products (Groups IV to VII), location (Groups VIII to XIV), and amount of net sales (Groups XV to XVIII).

Success in the men's clothing industry depends largely upon the good judgment of the manufacturer in buying his materials. Other factors of success are the possession of sufficient capital, modern factory equipment, efficient factory management, and an efficient selling organization. It is practically impossible to trace statistically the effect of each of these reasons for successful business, but a study of the percentages of the items of cost of the product will, at least to some extent, indicate whether or not the general management of an establishment is efficient.

Of the total additions to the manufacturing profit, interest received is the most important item, being 0.37 per cent, or more than three-fifths of the total additions. Of the total deductions from the manufacturing profit, interest paid on current loans is the most important item, being 0.75 per cent, or more than four-fifths of the total deductions.

The average manufacturing profit on net sales varies but slightly in the grouping according to method of manufacture. It thus appears that, on an average, the profits are nearly the same whether the contract system is employed or whether the goods are made entirely or in part in the manufacturing establishment.

The group of establishments with net sales of $2,000,000 and over shows a considerably larger percentage of manufacturing as well as final profit than the groups of establishments with smaller net sales

PERCENTAGES OF COST AND PROFIT, BY ESTABLISHMENTS.

Table 18, on page 59, shows percentages of cost and profit based on net sales, by individual establishments, arranged in the order of their manufacturing profits, from the highest profit to the greatest loss.

TABLE 17.—PERCENTAGES OF AVERAGE COSTS, BY SPECIFIED ITEMS, AND PROFITS, BASED ON NET SALES, BY GROUPS OF ESTABLISHMENTS.

Items.	All establishments reporting (64).	Establishments having—			Establishments with factory price of units—			Establishments making separate trousers, Group VII (8).
		No operating contracted, Group I (12).	Part operating contracted, Group II (30).	All operating contracted, Group III (22).	Under $8, Group IV (8).	$8 and under $15, Group V (37).	$15 and over, Group VI (11).	
	Per cent. 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00
Net sales	49.19	48.68	47.80	52.63	54.25	49.29	44.97	53.56
Raw materials	27.59	26.84	28.09	26.99	26.01	26.67	32.47	24.68
Direct labor	3.73	4.02	4.19	2.83	2.37	3.72	4.39	3.64
Indirect labor	2.26	2.78	2.35	1.70	1.62	2.17	2.73	2.62
Factory expense	3.28	3.59	3.36	2.89	3.07	3.23	3.25	3.45
Administrative expense	7.93	9.76	8.09	6.39	4.44	8.14	8.54	7.92
Selling expense	93.89	95.67	93.88	92.73	92.36	93.22	96.35	95.87
Total manufacturing and selling	.47	1.33	.39	.96	.....	.48	.....	2.07
Cost of goods purchased	.....	.....	.....	.....	.....	.....	.....	2.51
Deduct increase in stock of goods	.17	.....	.51	.40	1.57	.11	.84	.....
Add decrease in stock of goods	.....	.....	.....	.....	.....	.....	.....	.....
Cost of goods sold	94.53	94.34	94.78	94.11	93.93	93.81	97.19	95.63
Manufacturing profit	5.47	5.66	5.22	5.89	6.07	6.19	2.81	4.37
Interest received	.37	.34	.52	.06	.09	.22	1.24	.01
Rent equivalent	.12	.26	.13	.....	.03	.07	.38	.....
Miscellaneous income	.10	.02	.10	.14	.12	.06	.14	.35
Total additions to manufacturing profit	.59	.62	.75	.20	.24	.35	1.76	.36
Interest paid on current loans	.75	1.25	.71	.51	.94	.60	1.44	.32
Depreciation on equipment	.13	.23	.13	.07	.07	.12	.19	.10
Miscellaneous expense	.04	.13	.02	.01	.03	.02	.11	.05
Total deductions from manufacturing profit	.92	1.61	.86	.59	1.04	.74	1.74	.47
Final profit	5.14	4.67	5.11	5.50	5.27	5.80	2.83	4.26

TABLE 17.—PERCENTAGES OF AVERAGE COSTS, BY SPECIFIED ITEMS, AND PROFITS, BASED ON NET SALES, BY GROUPS OF ESTABLISHMENTS—Continued.

Items.	Establishments located in—							Establishments with net sales of—			
	Chicago, Group VIII (4).	Philadelphia, Group IX (7).	Cleveland and Milwaukee, Group X (4)	Rochester, Group XI (7).	Baltimore, Group XII (6).	New York City, Group XIII (30).	Cincinnati, Group XIV (8).	Under $500,000, Group XV (27).	$500,000 and under $1,000,000., Group XVI (14).	$1,000,000 and under $2,000,000, Group XVII (14).	$2,000,000 and over, Group XVIII (9).
Net sales	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00
Raw materials	43.71	48.44	50.77	48.07	49.67	51.81	46.61	49.76	48.98	48.47	49.59
Direct labor	26.71	24.00	19.82	30.47	28.63	28.37	26.55	26.35	28.07	29.00	26.59
Indirect labor	5.96	2.99	7.27	2.95	2.72	2.98	3.13	3.11	3.61	3.59	4.07
Factory expense	3.06	1.73	3.04	1.95	2.26	2.06	1.81	2.33	2.16	2.32	2.22
Administrative expense	3.37	4.14	3.64	2.50	3.66	3.09	4.38	4.32	3.51	3.18	2.94
Selling expense	9.47	8.15	10.39	7.88	8.78	6.76	6.59	7.62	6.60	8.60	8.00
Total manufacturing and selling	92.28	89.45	94.93	93.82	95.72	95.07	89.07	93.49	92.93	95.16	93.41
Cost of goods purchased		1.24				.53	3.39	1.05	.20	.99	.01
Deduct increase in stock of goods			1.25		.78	.61				.82	.15
Add decrease in stock of goods	.27	2.79		1.00			4.12	.72	2.76		
Cost of goods sold	92.55	93.48	93.68	94.82	94.94	94.99	96.58	95.26	95.89	95.33	93.27
Manufacturing profit	7.45	6.52	6.32	5.18	5.06	5.01	3.42	4.74	4.11	4.67	6.73
Interest received	.47	.12	.32	.85	.53	.14	.21	.11	.32	.57	.33
Rent equivalent	.15	.04	.06	.28	.37			.01		.17	.16
Miscellaneous income	.07	.06	.14	.04	.10	.12	.10	.09	.11	.05	.13
Total additions to manufacturing profit	.69	.22	.52	1.17	1.00	.26	.31	.21	.43	.79	.62
Interest paid on current loans	.46	.80	.22	.84	.64	.86	1.39	.64	.73	1.46	.28
Depreciation on equipment	.07	.13	.17	.14	.20	.12	.09	.14	.16	.14	.10
Miscellaneous expense		.02		.10	.01	.04		.04	.08	.06	.01
Total deductions from manufacturing profit	.53	.95	.39	1.08	.85	1.02	1.48	.82	.97	1.66	.39
Final profit	7.61	5.79	6.45	5.27	5.21	4.25	2.25	4.13	3.57	3.80	6.96

TABLE 18.—PERCENTAGES OF COSTS, BY SPECIFIED ITEMS, AND PROFITS OR LOSSES BASED ON NET SALES, ARRANGED BY ESTABLISHMENTS IN THE ORDER OF THEIR MANUFACTURING PROFIT FROM HIGHEST TO LOWEST, AND OF LOSSES FROM LOWEST TO HIGHEST.

Items.	No. 1.	No. 42.	No. 62.	No. 12.	No. 64.	No. 52.	No. 25.	No. 51.	No. 59.	No. 41.	No. 60.	No. 32.	No. 55.	No. 9.
Net sales	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00
Raw materials	61.29	42.67	54.46	45.04	56.29	40.59	52.07	55.81	45.44	51.51	55.16	50.55	52.41	43.10
Direct labor	12.43	25.11	29.24	24.45	26.55	22.20	27.65	23.12	25.15	28.46	25.59	29.29	23.94	32.64
Indirect labor	4.31	6.44	1.17	.99	1.57	2.06	3.29	2.06	2.93	2.29	1.60	2.18	1.96	4.00
Factory expense	3.72	3.16	.81	2.90	.78	2.42	1.89	1.37	1.22	1.34	1.01	1.66	2.28	2.87
Administrative expense	5.63	2.87	1.37	2.97	1.91	4.52	1.39	5.70	3.75	2.00	4.23	4.12	2.47	1.76
Selling expense	8.22	9.59	4.43	9.48	4.29	8.80	3.63	8.14	10.24	6.51	4.94	1.46	5.67	8.48
Total manufacturing and selling	95.60	89.84	91.48	85.83	91.39	80.59	89.92	96.20	88.73	92.11	92.53	89.26	88.73	92.85
Cost of goods purchased						12.09		3.42						
Deduct increase in stock of goods	8.38	.41	1.05		.07	1.12		7.81			.08			
Add decrease in stock of goods				5.34			1.80		3.20	.21		3.41	4.07	
Cost of goods sold	87.22	89.43	90.43	91.17	91.32	91.56	91.72	91.81	91.93	92.32	92.45	92.67	92.80	92.85
Manufacturing profit	12.78	10.57	9.57	8.83	8.68	8.44	8.28	8.19	8.07	7.68	7.55	7.33	7.20	7.15
Manufacturing loss														
Interest received	.05	.03			.05				.14			.10		.65
Rent equivalent				.54										.87
Miscellaneous income	.03							.51						.07
Total additions to manufacturing profit	.08	.03		.54	.05			.51	.14			.10		1.59
Total deductions from manufacturing loss														
Interest paid on current loans	1.41	.25	.98	.48	.10	.79	.05		1.07	.38		2.00	1.18	1.30
Depreciation on equipment	.25	.06	.13	.28	.03	.17	.05	.08	.10	.05	.06	.02	.13	.21
Miscellaneous expense														.75
Total deductions from manufacturing profit	1.66	.31	1.11	.76	.13	.96	.10	.08	1.17	.43	.06	2.02	1.31	2.26
Total additions to manufacturing loss														
Final profit	11.20	10.29	8.46	8.61	8.60	7.48	8.18	8.62	7.04	7.25	7.49	5.41	5.89	6.48
Final loss														

TABLE 18.—PERCENTAGES OF COSTS, BY SPECIFIED ITEMS, AND PROFITS OR LOSSES BASED ON NET SALES, ARRANGED BY ESTABLISHMENTS IN THE ORDER OF THEIR MANUFACTURING PROFIT FROM HIGHEST TO LOWEST, AND OF LOSSES FROM LOWEST TO HIGHEST—Continued.

Items.	No. 45.	No. 33.	No. 22.	No. 3.	No. 50.	No. 27.	No. 4.	No. 58.	No. 40.	No. 56.	No. 19.	No. 11.	No. 43.	No. 20.
	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Raw materials	57.01	56.53	55.40	56.59	52.54	41.59	62.04	59.87	52.61	52.83	48.31	46.55	44.77	44.69
Direct labor	23.78	26.87	31.71	18.54	26.73	28.19	23.99	25.09	19.17	29.62	29.82	21.40	37.38	26.78
Indirect labor	2.08	1.26	2.47	2.97	1.17	2.26	3.42	2.17	7.75	1.87	4.27	7.14	1.06	4.20
Factory expense	.74	1.53	2.26	2.01	1.46	2.71	1.71	1.52	2.75	1.17	2.29	3.58	1.87	1.94
Administrative expense	2.66	4.05	3.40	6.55	3.78	5.14	2.10	1.85	2.94	1.60	2.31	4.41	4.08	4.73
Selling expense	5.09	6.13	3.24	8.41	4.37	9.76	4.09	1.91	8.16	7.22	3.79	14.91	6.83	9.33
Total manufacturing and selling	91.36	96.37	98.48	95.07	90.05	89.65	97.35	92.41	93.38	94.31	90.79	97.99	95.99	91.67
Cost of goods purchased	.....	.....	.....	.....	.....	.21	.....	.....	.....	.....	.06	.....	.....	.11
Deduct increase in stock of goods	.....	3.28	5.37	1.86	.....	.....	3.85	.....	.....	.51	.....	3.86	1.78	.....
Add decrease in stock of goods	1.60	.....	.....	.....	3.36	3.63	.....	1.19	.39	.....	3.06	.....	.....	2.43
Cost of goods sold	92.96	93.09	93.11	93.21	93.41	93.49	93.50	93.60	93.77	93.80	93.91	94.13	94.21	94.21
Manufacturing profit	7.04	6.91	6.89	6.79	6.59	6.51	6.50	6.40	6.23	6.20	6.09	5.87	5.79	5.79
Manufacturing loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Interest received	.28	.04	.....	.10	.....	.....	.....	.26	.41	.....	.....	.17	.....	.12
Rent equivalent	.....	.....	.....	.26	.....	.....	.....	.....	.....	.....	.....	.20	.....	.....
Miscellaneous income	.25	.28	.....	.....	.....	.01	.09	.....	.21	.13	.31	.04	.....	.....
Total additions to manufacturing profit	.53	.32	.....	.36	.....	.01	.09	.26	.62	.13	.31	.41	.....	.12
Total deductions from manufacturing loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Interest paid on current loans	.79	1.25	.44	.06	.68	.78	.13	.58	.....	.09	.18	.35	.21	.88
Depreciation on equipment	.03	.10	.10	.29	.03	.48	.07	.09	.15	.05	.22	.19	.06	.06
Miscellaneous expense	.....	.02	.....	.15	.....	.76	.43	.....	.....	.....	.....	.....	.....	.....
Total deductions from manufacturing profit	.82	1.37	.54	.50	.71	2.02	.63	.67	.15	.14	.40	.54	.27	.94
Total additions to manufacturing loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Final profit	6.75	5.86	6.35	6.65	5.88	4.50	5.96	5.99	6.70	6.19	6.00	5.74	5.52	4.97
Final loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Items.	No. 46.	No. 38.	No. 5.	No. 14.	No. 17.	No. 2.	No. 47.	No. 6.	No. 35.	No. 26.	No. 48.	No. 34.	No. 57.	No. 23.
	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.
Net sales	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Raw materials	44.47	46.59	63.28	46.94	50.98	53.83	53.55	46.56	48.22	46.94	49.57	44.24	47.72	46.39
Direct labor	21.51	26.76	21.66	23.36	36.83	22.78	26.84	28.83	31.44	30.24	27.98	26.91	26.45	33.70
Indirect labor	1.86	3.44	2.48	4.67	1.63	2.63	2.34	4.70	3.61	3.39	1.57	5.80	3.38	5.09
Factory expense	2.16	2.19	2.46	2.60	1.56	3.59	1.34	2.14	1.75	1.73	1.54	3.32	1.40	2.52
Administrative expense	4.02	4.40	2.95	5.55	3.27	2.04	4.20	3.44	2.00	3.99	4.39	4.32	5.33	2.89
Selling expense	7.61	9.86	4.88	10.80	4.69	7.32	6.74	5.04	10.05	8.66	9.59	11.67	5.02	5.32
Total manufacturing and selling	81.63	93.24	97.71	93.92	98.96	92.19	95.01	90.71	97.07	94.95	94.64	96.26	89.30	95.71
Cost of goods purchased	14.67	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Deduct increase in stock of goods	1.78	.....	2.95	.....	3.99	.....	.....	.....	1.64	.....	.....	.....	.....	.....
Add decrease in stock of goods	.....	1.35	.....	.88	.....	2.86	.28	4.68	.....	.55	1.56	.....	6.96	.70
Cost of goods sold	94.52	94.59	94.76	94.80	94.97	95.05	95.29	95.39	95.43	95.50	96.20	96.26	96.26	96.41
Manufacturing profit	5.48	5.41	5.24	5.20	5.03	4.95	4.71	4.61	4.57	4.50	3.80	3.74	3.74	3.59
Manufacturing loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Interest received	.17	.28	.....	.47	.12	.....	.03	.....	.42	.....	.....	.79	.....	.....
Rent equivalent	.....	.85	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous income	.....	.06	.....	.....	.08	.....	.....	.....	.01	.....	.34	.....	.58	.72
Total additions to manufacturing profit	.17	1.19	.....	.47	.20	.....	.03	.....	.43	.....	.34	.79	.58	.72
Total deductions from manufacturing loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Interest paid on current loans	.99	1.02	.30	1.20	.10	.29	.73	.81	1.37	.66	.04	1.88	1.64	.42
Depreciation on equipment	.04	.19	.08	.15	.12	.12	.09	.22	.20	.15	.....	.08	.03	.20
Miscellaneous expense	.....	.04	.12	.....	.....	.09	.....	.....	.....	.....	.....	.....	.....	.31
Total deductions from manufacturing profit	1.03	1.25	.50	1.35	.22	.50	.82	1.03	1.57	.81	.04	1.96	1.67	.93
Total additions to manufacturing loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Final profit	4.62	5.35	4.74	4.32	5.01	4.45	3.92	3.58	3.43	3.69	4.10	2.57	2.65	3.38
Final loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE 18.—PERCENTAGES OF COSTS, BY SPECIFIED ITEMS, AND PROFITS OR LOSSES BASED ON NET SALES, ARRANGED BY ESTABLISHMENTS IN THE ORDER OF THEIR MANUFACTURING PROFIT FROM HIGHEST TO LOWEST, AND OF LOSSES FROM LOWEST TO HIGHEST—Continued.

Items.	No. 28.	No. 39.	No. 8.	No. 24.	No. 30.	No. 21.	No. 49.	No. 16.	No. 63.	No. 53.	No. 13.	No. 7.	No. 10.	No. 61.
Net sales	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00
Raw materials	52.03	45.07	53.94	41.05	44.79	44.61	39.34	43.63	54.18	51.02	45.71	39.24	49.72	52.28
Direct labor	30.04	30.25	27.42	31.43	23.92	28.42	20.76	27.50	26.12	31.04	27.12	28.98	36.32	26.82
Indirect labor	2.39	4.94	5.82	5.32	3.13	3.84	3.80	3.84	4.64	2.27	4.14	5.59	4.43	4.13
Factory expense	2.55	2.61	2.75	2.09	1.35	3.92	3.20	2.30	2.83	2.76	1.81	2.99	2.26	3.54
Administrative expense	2.03	3.64	4.35	3.21	3.36	3.07	5.28	10.96	3.20	3.07	6.70	6.16	3.64	2.17
Selling expense	5.46	7.89	7.79	9.53	9.02	7.07	9.48	9.35	8.34	9.68	10.90	12.04	12.01	7.85
Total manufacturing and selling	94.50	94.40	102.07	92.63	85.57	90.93	81.86	97.58	99.31	99.84	96.38	95.00	108.38	96.79
Cost of goods purchased	.....	.....	.....	.....	12.54	.12	.....	.....	.15	.....	.....	.....	.....	5.10
Deduct increase in stock of goods	.....	.....	5.41	.....	1.22	.....	.....	.....	1.59	1.92	.....	.....	9.90	3.19
Add decrease in stock of goods	2.09	2.19	.....	4.12	.....	5.88	15.14	.19	.....	.....	1.61	3.08	.....	.....
Cost of goods sold	96.59	96.59	96.66	96.75	96.89	96.93	97.00	97.77	97.87	97.92	97.99	98.08	98.48	98.70
Manufacturing profit	3.41	3.41	3.34	3.25	3.11	3.07	3.00	2.23	2.13	2.08	2.01	1.92	1.52	1.30
Manufacturing loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Interest received	.....	1.36	.....	.38	.16	.....	.19	.....	.....	.....	.....	3.39	.....	.25
Rent equivalent	.....	.63	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous income	.....	.29	.....	.01	.....	.....	.....	.07	.59	.07	.02	.....	.....	.12
Total additions to manufacturing profit	.....	2.28	.....	.39	.16	.....	.19	.07	.59	.07	.02	3.39	.....	.37
Total deductions from manufacturing loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Interest paid on current loans	.57	.07	.86	.58	1.30	.29	1.59	.....	.14	.61	1.45	1.89	4.50	.59
Depreciation on equipment	.06	.....	.29	.17	.11	.16	.08	.22	.08	.06	.09	.29	.25	.09
Miscellaneous expense	.....	.....	.....	.....	.....	.06	.....	.04	.....	.....	.....	.....	.....	.10
Total deductions from manufacturing profit	.63	.07	1.15	.75	1.41	.51	1.67	.26	.22	.67	1.54	2.18	4.75	.78
Total additions to manufacturing loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Final profit	2.78	5.62	2.19	2.89	1.86	2.56	1.52	2.04	2.50	1.48	.49	3.13	.....	.89
Final loss	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.23	.....

Items.	No. 31.	No. 54.	No. 37.	No. 15.	No. 29.	No. 36.	No. 18.	No. 44.
Net sales	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00	Per ct. 100.00
Raw materials	42.56	38.40	55.04	49.58	44.60	44.65	46.12	54.64
Direct labor	35.14	31.53	36.98	28.09	25.29	32.42	27.01	29.32
Indirect labor	5.90	4.24	2.67	5.75	2.97	2.63	5.01	3.11
Factory expense	4.56	2.79	1.56	3.33	2.11	2.74	2.76	2.52
Administrative expense	3.25	2.26	4.34	5.61	4.20	2.83	6.86	4.29
Selling expense	6.25	8.63	9.56	8.27	5.73	9.68	14.41	9.23
Total manufacturing and selling	97.66	87.85	110.15	100.63	84.90	94.95	102.17	103.11
Cost of goods purchased	.....	.....	.....	.....	1.76	.....	.....	.....
Deduct increase in stock of goods	.....	.....	9.88	.23	.....	.....	1.07	1.39
Add decrease in stock of goods	1.27	12.11	.....	.....	13.88	5.82	.....	.....
Cost of goods sold	98.93	99.96	100.27	100.40	100.54	100.77	101.10	101.72
Manufacturing profit	1.07	.04	.....	.....	.....	.....	.....	.....
Manufacturing loss	.....	.....	.27	.40	.54	.77	1.10	1.72
Interest received	.....	.....	1.89	.13	.10	3.80	1.31	.....
Rent equivalent	.....	.....	.....	.....	.....	.87	.....	.....
Miscellaneous income	.....	.....	.33	.....	.22	.17	.56	.....
Total additions to manufacturing profit	.....	.....	.....	.....	.....	.....	.....	.....
Total deductions from manufacturing loss	.....	.....	2.22	.13	.32	4.84	1.87	.....
Interest paid on current loans	2.34	.86	.38	.70	.74	1.31	1.86	.99
Depreciation on equipment	.19	.18	.16	.18	.07	.19	.34	.08
Miscellaneous expense	.....	.....	.....	.....	.....	.01	.....	.....
Total deductions from manufacturing profit	2.53	1.04	.....	.....	.....	.....	.....	.....
Total additions to manufacturing loss	.....	.....	.54	.88	.81	1.51	2.20	1.07
Final profit	.....	.....	1.41	.....	.....	2.56	.....	.....
Final loss	1.46	1.00	.....	1.15	1.03	.....	1.43	2.79

The foregoing table is presented to compare individual establishments in regard to items of expense and to show their relative efficiency as measured by their percentages of manufacturing profit.

PROFIT NOT DEPENDENT ON LABOR COST.

It does not follow that because one establishment had a higher proportion of expenditure for labor than other establishments of the same kind it had less profits. The fact that high profits are not dependent on low labor cost is strikingly illustrated by establishments Nos. 62 and 44, the former having a manufacturing profit of 9.57 per cent and the latter a manufacturing loss of 1.72 per cent, although the direct labor costs—29.24 per cent for establishment No. 62 and 29.32 per cent for establishment No. 44—may be said to be same; or by establishments Nos. 42 and 3, the former showing a manufacturing profit of 10.57 per cent, and the latter 6.79 per cent, although the former shows a direct labor cost of 25.11 per cent and the latter only 18.54 per cent, which is next to the lowest labor cost.

Of the 58 establishments that show manufacturing profits, 2 earned more than 10 per cent on net sales, 31 earned more than 5 but less than 10 per cent, 24 earned more than 1 but less than 5 per cent, and 1 earned less than 1 per cent.

Though not indicated in the table, 3 establishments with net sales of less than $500,000 and 4 with net sales of $2,000,000 or more, are among the 10 establishments earning the highest percentage of manufacturing profit; and among the 10 establishments at the other extreme, or those earning the smallest manufacturing profit and those showing a manufacturing loss, there are 4 establishments with net sales of less than $500,000 and 4 with net sales of $1,000,000 but less than $2,000,000.

COST BASED ON MANUFACTURING AND SELLING EXPENSE.

The foregoing table shows the percentages of the items of cost and the percentages of profit based on net sales. The percentages of the items of cost, if based on the total cost of goods manufactured and the selling expense, are different from what they are if based on net sales. If based on the net sales, the item of profit is a part of the divisor, and in that case the percentage of each item of cost is smaller than when the computation is based on the cost of manufacturing and selling. When there is a loss, the divisor is correspondingly smaller and the quotient in each case is larger.

Furthermore, the amount of goods manufactured during a business year may be greater or less than the amount of net sales. Comparison of the inventory of finished goods on hand at the end of a business year with the inventory at the beginning of the year may show a smaller amount on hand at the end of the year, in which case the quantity of the goods sold during the year would have been greater than the quantity manufactured and purchased. If the closing inventory were greater than the opening inventory, the quantity of goods sold during the year would have been less than the quantity manufactured and purchased.

In Table 19, on page 66, the percentages of the items of cost are based on the total manufacturing and selling expense; that is, on the total cost of the product and selling expense of the factory during the year, and not on the amount of sales.

Raw materials account for more than half of the total cost, being 52.39 per cent for all establishments. There is very little difference in the relative cost of materials in Groups I and II, but in establishments having all operating contracted, Group III, the relative cost is higher.

Direct labor, next to raw materials, bears the highest proportion of the total cost, being 29.29 per cent for all establishments. Direct labor in Group II, part operating contracted, and in Group III, all operating contracted, bears a higher proportion of the total cost than in Group I, no operating contracted. This is due, in a measure, to the fact that the contract price for operating includes not only the direct labor paid by the contractor, but his indirect labor and factory expense as well.

Indirect labor was but 3.97 per cent of the total manufacturing and selling expense.

Factory expense also shows the effect of the contract system on the distribution of costs. It will be observed that the total factory expense decreases in proportion to the extent that contract labor is employed, although the same can not be said of all the items under factory expense. Fire insurance, an exception, shows only a very small variation in the percentages, owing to the fact that manufacturers employing contract labor insure themselves against loss from fire by having their insurance policies cover not only the stock in their own shops, but that in the contract shops as well.

The total administrative expense does not show a great variation in the costs for the first three groups. The effect of the contract system is not so marked in this division of expenses as in the items of labor and factory expense.

The percentages for raw materials and for direct labor in Table 19 present interesting differences between establishments manufacturing low, medium, and high-priced clothing. It will be seen that the percentages for raw materials decrease and those for direct labor increase, as the factory price of the product rises; that is, a person buying a low grade suit would get relatively more material and less workmanship for his money than one buying a medium or high-grade suit.

An examination of the percentages under direct labor shows that wages increase and that contract work decreases in importance as the factory price of the product increases in value. In other words, those establishments manufacturing low-grade suits employ more contract labor than those manufacturing medium or high-grade suits. Wages increase from 7.18 per cent in Group IV (factory price under $8) to 25.93 per cent in Group VI (factory price $15 and over), and for the same groups the item paid to contractors decreases from 20.98 to 7.77 per cent, respectively.

The percentages for indirect labor and factory expense also increase as the factory price of the product increases. Welfare work appears to be more general in establishments manufacturing the medium and the high-grade suits than in those manufacturing the cheap grades or those manufacturing separate trousers, etc.

TABLE 19.—PERCENTAGES OF AVERAGE COSTS, BY SPECIFIED ITEMS, BASED ON THE TOTAL MANUFACTURING AND SELLING EXPENSE, BY GROUPS OF ESTABLISHMENTS.

Items.	All establishments reporting (64).	Establishments having—			Establishments with factory price of units—			Establishments making separate trousers, etc., Group VII (8).
		No operating contracted, Group I (12).	Part operating contracted, Group II (30).	All operating contracted, Group III (22).	Under $8, Group IV (8).	$8 and under $15, Group V (37).	$15 and over, Group VI (11).	
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
Total manufacturing and selling expense	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Raw materials	52.39	50.89	50.91	56.75	58.73	52.88	46.68	55.87
Direct labor:								
Wages	16.19	22.75	19.92	3.36	7.18	15.51	25.93	6.98
Paid to contractors	13.10	5.30	10.00	25.32	20.98	13.10	7.77	18.76
Total direct labor	29.29	28.05	29.92	28.68	28.16	28.61	33.70	25.74
Indirect labor:								
Salaries of officials	.61	.66	.63	.56	.39	.67	.50	.66
Wages	3.36	3.54	3.83	2.17	2.17	3.32	4.06	3.13
Total indirect labor	3.97	4.20	4.46	2.73	2.56	3.99	4.56	3.79
Factory expense:								
Rent	1.02	1.08	1.06	.88	.84	.91	1.38	1.26
Power, light, heat	.32	.35	.38	.16	.24	.33	.33	.25
Repairs on equipment	.13	.23	.15	.02	.06	.14	.17	.05
Fire insurance	.22	.23	.21	.24	.33	.20	.26	.24
Insurance, other kinds	.04	.08	.04	.02	.06	.04	.06	.01
Workmen's compensation or employers' liability	.03	.06	.03	.02	.03	.02	.06	.03
Welfare work	.07	.03	.11	----------	.01	.08	.07	.01
Taxes, State and local	.10	.19	.11	----------	.06	.11	.09	.02
Other factory expense	.48	.66	.42	.50	.13	.50	.41	.86
Total factory expense	2.41	2.91	2.51	1.84	1.76	2.33	2.83	2.73
Administrative expense:								
Salaries of officials	.88	.76	1.00	.69	1.39	.90	.63	.82
Salaries of office force	.83	.91	.86	.71	.69	.82	.84	1.01
Rent, general office	.11	.15	.12	.06	.06	.08	.22	.11
Office expense	.29	.36	.28	.25	.21	.27	.35	.34
Collection expense	.06	.12	.05	.06	.06	.07	.05	.07
Bad debts	.88	.95	.78	1.06	1.30	.90	.65	.87
Corporation tax	.03	.06	.02	.01	.05	.03	.02	.03
Other administrative expense	.41	.44	.47	.27	.22	.39	.61	.35
Total administrative expense	3.49	3.75	3.58	3.11	3.98	3.46	3.37	3.60
Selling expense:								
Salaries of officials	.92	1.24	.71	1.18	.86	.87	1.02	1.19
Salaries, commission, and expense of salesmen	5.01	5.55	5.01	4.63	3.27	5.18	4.76	5.72
Wages	.20	.41	.21	.05	----------	.19	.33	.14
Rent, show and shipping rooms	.16	.23	.16	.10	.09	.12	.32	.14
Packing materials	.21	.28	.19	.20	.22	.19	.25	.26
Cartage and freight outward	.32	.28	.33	.33	.23	.33	.28	.48
Advertising	1.25	1.59	1.60	.25	.01	1.45	1.39	.21
Other selling expense	.38	.62	.41	.15	.13	.40	.51	.13
Total selling expense	8.45	10.20	8.62	6.89	4.81	8.73	8.86	8.27

TABLE 19.—PERCENTAGES OF AVERAGE COSTS, BY SPECIFIED ITEMS, BASED ON THE TOTAL MANUFACTURING AND SELLING EXPENSE, BY GROUPS OF ESTABLISHMENTS—Continued.

Items.	Establishments located in—							Establishments with net sales of—			
	Chicago, Group VIII (4).	Philadelphia, Group IX (7).	Cleveland and Milwaukee, Group X (4).	Rochester, Group XI (7).	Baltimore, Group XII (6).	New York City, Group XIII (30).	Cincinnati, Group XIV (6).	Under $500,000, Group XV (27).	$500,000 and under $1,000,000, Group XVI (14).	$1,000,000 and under $2,000,000, Group XVII (14).	$2,000,000 and over, Group XVIII (9).
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
Total manufacturing and selling expense	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Raw materials	47.37	54.15	53.48	51.24	51.89	54.50	52.32	53.23	52.70	50.94	53.08
Direct labor:											
Wages	25.08	7.98	17.46	21.77	24.01	9.13	12.21	12.05	17.00	15.42	17.81
Paid to contractors	3.87	18.85	3.42	10.71	5.90	20.71	17.60	16.14	13.20	15.05	10.65
Total direct labor	28.95	26.83	20.88	32.48	29.91	29.84	29.81	28.19	30.20	30.47	28.46
Indirect labor:											
Salaries of officials	.28	.72	1.70	.58	.54	.55	.47	.72	.74	.40	.69
Wages	6.18	2.62	5.96	2.57	2.30	2.58	3.04	2.61	3.15	3.37	3.67
Total indirect labor	6.46	3.34	7.66	3.15	2.84	3.13	3.51	3.33	3.89	3.77	4.36
Factory expense:											
Rent	1.39	.79	.72	.77	.77	1.13	1.16	1.29	1.27	1.05	.82
Power, light, heat	.52	.50	.54	.35	.34	.15	.28	.35	.26	.31	.33
Repairs on equipment	.11	.06	.53	.12	.16	.06	.11	.08	.11	.15	.15
Fire insurance	.21	.38	.23	.16	.18	.24	.22	.36	.30	.20	.16
Insurance, other kinds	.01	.04	.05	.03	.07	.06	----------	.03	.10	.05	.02
Workmen's compensation or employers' liability	.02	.02	.04	.04	.02	.04	.03	.05	.04	.04	.01
Welfare work	.16	.03	.27	.06	.08	----------	.02	.03	.02	.04	.12
Taxes, State and local	.10	.01	.37	.12	.19	----------	.14	.05	.04	.13	.11
Other factory expense	.79	.11	.45	.42	.55	.49	.08	.25	.19	.47	.66
Total factory expense	3.31	1.94	3.20	2.07	2.36	2.17	2.04	2.49	2.33	2.44	2.38
Administrative expense:											
Salaries of officials	1.18	.99	1.24	.64	.67	.76	1.49	1.03	.91	.72	.94
Salaries of office force	.98	.92	.86	.50	1.06	.75	1.22	1.02	.85	.76	.81
Rent, general office	.11	.16	.12	.12	.06	.10	.18	.16	.14	.15	.05
Office expense	.28	.31	.31	.22	.29	.29	.42	.33	.35	.27	.26
Collection expense	.05	.17	.09	.03	.13	.04	.09	.09	.04	.08	.06
Bad debts	.48	1.80	.68	.54	1.34	.91	1.21	1.53	.99	.81	.69
Corporation tax	.08	.01	.09	.01	.01	01	.03	.03	.02	.03	.03
Other administrative expense	.49	.27	.44	.60	.26	.39	.28	.42	.48	.52	.31
Total administrative expense	3.65	4.63	3.83	2.66	3.82	3.25	4.92	4.61	3.78	3.34	3.15
Selling expense:											
Salaries of officials	.62	1.35	.81	.97	.61	1.17	.43	1.35	1.13	.79	.80
Salaries, commission, and expense of salesmen	5.01	5.66	5.80	4.49	5.89	4.55	5.86	5.42	4.53	5.34	4.79
Wages	.04	----------	.03	.31	.80	.10	----------	.13	.10	.23	.23
Rent, show and shipping rooms	.09	.28	.05	.14	.22	.18	.14	.21	.28	.18	.09
Packing materials	.14	.20	.17	.22	.20	.24	.23	.21	.27	.22	.18
Cartage and freight outward	.31	.29	.56	.33	.21	.32	.25	.26	.31	.28	.38
Advertising	3.18	.89	3.04	1.53	.84	.37	.27	.33	.27	1.60	1.63
Other selling expense	.87	.44	.49	.41	.41	.18	.22	.24	.21	.40	.47
Total selling expense	10.26	9.11	10.95	8.40	9.18	7.11	7.40	8.15	7.10	9.04	8.57

In the classification according to the prices of the products, administrative expense is found to be highest in Group IV and lowest in Group VI, this being the same order as for raw materials, but the reverse of the other principal divisions of expense. Salaries of officials, with 1.39 per cent, and bad debts, with 1.30 per cent, in Group IV are considerably above the averages for all establishments.

The variation in the percentages for total selling expense from 4.81 per cent in Group IV (factory price under $8) to 8.86 per cent in Group VI (factory price $15 and over) is due principally to the differences existing in the percentages for salaries, commissions, and expense of salesmen, and for advertising. The national advertisers are generally found among the manufacturers of medium and high-grade clothing.

Some establishments with a sufficient working capital are in a position to discount all their bills and some (those purchasing materials in large quantities) are not only in a position to buy at lower prices, but to obtain special discounts as well; whereas the establishments with insufficient working capital are not in a position to discount their bills nor are the smaller establishments in a position to obtain special discounts and special prices. The influence of these factors on the percentages for raw materials can not be shown by establishments without disclosing their identity.

Chicago, notwithstanding higher freight rates on account of the distance from the producing centers of the raw materials, has, with 47.37 per cent, the lowest percentage of cost for raw materials, and New York City, with 54.50 per cent, the highest percentage.

The group, Cleveland and Milwaukee, with 20.88 per cent, shows the lowest direct labor cost, and Rochester, with 32.48 per cent, the highest direct labor cost. If the total direct labor and the total indirect labor be combined, Rochester shows the highest percentage of cost, followed in order by Chicago, Cincinnati, New York City, Baltimore, Philadelphia, Cleveland and Milwaukee.

MANUFACTURING AND SELLING COST, BY ESTABLISHMENTS.

Table 20, on page 72, shows percentages for the items of costs in detail and for the main divisions of costs by individual establishments arranged in the order of their manufacturing profits from the highest to the lowest profit, and of their manufacturing losses from the lowest to the highest loss. All the percentages are based on the total cost of manufacturing and selling.

For good reasons an establishment may have larger proportionate costs for certain items of expense than another establishment or than the average for the group to which it belongs. This is somewhat dependent on the quality of the goods that the establishment produces or on the importance that some manufacturers give to various items of costs, for some manufacturers have found it profitable to spend more than the average for selling—that is, to pay higher salaries or commissions to salesmen of exceptional ability or to pay out large sums for advertising. The same ratio of expenditure for all items will not be found in any two establishments, but if the percentages for many items are much greater than the average of similar establishments, the profit will be smaller or there may be a loss.

The total cost of manufacture and selling being used as the base, it follows that all items of cost, expressed in percentages, must add to 100 per cent, but just what the relation to the total cost each item of expense should bear could be determined only in case an establishment was efficient in all its departments. One establishment may pride itself upon the efficiency of its sales department and at the same time have inefficient shops, or vice versa; or another establishment may be very efficient in buying its materials and inefficient in other departments.

The average percentages for the various groups (which can not be considered as representative of a model factory, because a model factory should be better than an average factory) will afford the manufacturer an opportunity to compare the percentages for his own establishment with the average percentages for the groups in which his establishment is found. If such comparison be made the result will show which items of cost are relatively high.

For the 64 establishments that reported data there are large variations in the percentages for the various items of cost.

Raw-material cost is more than 50 per cent of the total cost in 38 establishments, being highest in establishment No. 58, with 64.79 per cent, and lowest in establishment No. 7, with 41.31 per cent. An enumeration of the percentages for raw materials shows that there are 6 establishments with costs between 60 and 65 per cent, 16 between 55 and 60 per cent, 16 between 50 and 55 per cent, 21 between 45 and 50 per cent, and 5 between 40 and 45 per cent. The causes for this variation are as follows: (1) The quality of the materials used; (2) waste of materials resulting from cutting, some of which can not be avoided but which can be reduced to a minimum by efficient supervision and workmanship; (3) waste resulting from cutting certain materials—such as stripes—which must be matched in the finished product, the waste being greater in such materials than in plain materials that require no matching; (4) loss of materials due to careless handling in the raw stock room by the employees, or to an inefficient check upon the raw stock taken from the stock room; (5) the average sizes running higher in one establishment than another; (6) discounts; (7) special prices. The percentage of raw material depends, of course, also upon the other items of cost having a higher or lower relative proportion to the total cost in one establishment than in another.

Direct labor, next to raw materials, shows the largest percentage of the total cost, for 6 establishments show costs between 35 and 40 per cent, 20 between 30 and 35 per cent, 29 between 25 and 30 per cent, 7 between 20 and 25 per cent, and 2 less than 20 per cent. Of the 64 establishments, 30 are above and 34 are below the average direct-labor cost of 29.29 per cent. Establishment No. 43, with 38.94 per cent, shows the highest cost, and establishment No. 1, with 13 per cent, the lowest cost.

TABLE 20.—PERCENTAGES OF COSTS, BY SPECIFIED ITEMS, BASED ON THE TOTAL MANUFACTURING AND SELLING EXPENSE, ARRANGED BY ESTABLISHMENTS IN THE ORDER OF THEIR MANUFACTURING PROFITS FROM THE HIGHEST TO THE LOWEST AND OF LOSSES FROM THE LOWEST TO THE HIGHEST.

Items.	No. 1.	No. 42.	No. 62.	No. 12.	No. 64.	No. 52.	No. 25.	No. 51.	No. 59.	No. 41.	No. 60.	No. 32.	No. 55.	No. 9.
	Per ct. 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00
Total manufacturing and selling expense														
Raw materials	64.11	47.50	59.54	52.48	61.59	50.37	57.91	58.01	51.21	55.93	59.62	56.63	59.06	46.42
Direct labor:														
Wages	13.00	24.95	2.28	28.49	1.57	3.33	18.03	2.89	3.97	14.33	1.48	7.19	3.30	35.15
Paid to contractors	.....	3.00	29.68	.....	27.48	24.22	12.72	21.15	24.38	16.57	26.18	25.63	23.68	.....
Total direct labor	13.00	27.95	31.96	28.49	29.05	27.55	30.75	24.04	28.35	30.90	27.66	32.82	26.98	35.15
Indirect labor:														
Salaries of officials	.....	.....	.34	.41	.60	.84	.30	.42	.31	.78	.45	.....	.52	.50
Wages	4.51	7.17	.94	.74	1.12	1.71	3.36	1.72	3.00	1.70	1.27	2.44	1.68	3.81
Total indirect labor	4.51	7.17	1.28	1.15	1.72	2.55	3.66	2.14	3.31	2.48	1.72	2.44	2.20	4.31
Factory expense:														
Rent	.79	1.34	.51	.89	.42	2.11	.99	1.02	.55	.43	.74	.81	1.11	1.17
Power, light, heat	.75	.65	.02	.16	.06	.15	.31	.14	.38	.20	.02	.31	.52	.51
Repairs on equipment	.22	.08	.02	.20	.01	.03	.19	.....	.06	.....	.01	.08	.20	.25
Fire insurance	.89	.16	.19	.06	.14	.54	.18	.22	.26	.14	.28	.26	.40	.04
Insurance, other kinds	.....	.....	.....	.....	.....	.02	.05	.02	.....	.....	.....	.....	.07	.13
Workmen's compensation or employers' liability	.09	.01	.01	.....	.01	.02	.02	.02	.01	.03	.04	.04	.03	.09
Welfare work	.....	.11	.....	.07	.....	.....	.....	.....	.....	.02	.....	.02	.....	.12
Taxes, State and local	.50	.10	.....	.32	.....	.....	.07	.....	.01	.....	.....	.22	.....	.21
Other factory expense	.65	1.06	.14	1.67	.21	.13	.29	.....	.10	.63	.....	.12	.25	.57
Total factory expense	3.89	3.51	.89	3.37	.85	3.00	2.10	1.42	1.37	1.45	1.09	1.86	2.58	3.09
Administrative expense:														
Salaries of officials	1.77	1.61	.34	.42	.60	.84	.30	1.07	.96	.79	1.35	2.80	.49	.....
Salaries of office force	1.38	.72	.48	1.11	.44	1.08	.55	1.80	1.02	.45	.77	1.17	.86	.45
Rent, general office	.54	.04	.01	.05	.01	.12	.05	.30	.20	.01	.02	.12	.07	.14
Office expense	.33	.21	.17	.27	.18	.50	.13	.36	.40	.25	.09	.20	.46	.28
Collection expense	.13	.05	.02	.16	.03	.17	.....	.24	.28	.02	.....	.....	.03	.03
Bad debts	.41	.11	.33	1.29	.72	1.89	.21	2.07	1.01	.36	2.34	.....	.40	.40
Corporation tax	.63	.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.06	.11	.04
Other administrative expense	.70	.34	.14	.16	.12	1.01	.30	.09	.35	.29	.....	.26	.37	.56
Total administrative expense	5.89	3.20	1.49	3.46	2.10	5.61	1.54	5.93	4.22	2.17	4.57	4.61	2.79	1.90
Selling expense:														
Salaries of officials	3.25	.....	.68	.41	1.78	.84	.30	1.71	.61	1.56	1.81	.....	.98	1.65
Salaries, commission, and expense of salesmen	4.06	4.41	3.22	8.12	2.44	8.37	3.17	5.39	7.84	3.68	2.99	1.27	3.98	3.09
Wages	.....	.01	.....	.67	.....	.53	.....	.....	.....	.....	.....	.....	.73	.60
Rent, show and shipping rooms	.25	.02	.02	.10	.01	.12	.05	.30	.34	.05	.05	.05	.37	.25
Packing materials	.31	.16	.20	.24	.12	.24	.03	.28	.20	.19	.10	.18	.12	.69
Cartage and freight outward	.33	.31	.25	.29	.28	.48	.19	.36	.27	.37	.30	.....	.04	.30
Advertising	.11	4.59	.02	.87	.....	.34	.....	.17	1.87	.70	.....	.....	.....	1.63
Other selling expense	.29	1.17	.45	.35	.06	.....	.30	.25	.41	.52	.09	.14	.17	.92
Total selling expense	8.60	10.67	4.84	11.05	4.69	10.92	4.04	8.46	11.54	7.07	5.34	1.64	6.39	9.13

TABLE 20.—PERCENTAGES OF COSTS, BY SPECIFIED ITEMS, BASED ON THE TOTAL MANUFACTURING AND SELLING EXPENSE, ARRANGED BY ESTABLISHMENTS IN THE ORDER OF THEIR MANUFACTURING PROFITS FROM THE HIGHEST TO THE LOWEST AND OF LOSSES FROM THE LOWEST TO THE HIGHEST—Continued.

Items.	No. 45.	No. 33.	No. 22.	No. 3.	No. 50.	No. 27.	No. 4.	No. 58.	No. 40.	No. 56.	No. 19.	No. 11.	No. 43.	No. 20.
	Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
Total manufacturing and selling expense	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Raw materials	62.40	58.66	56.25	59.53	58.35	46.39	63.73	64.79	56.34	56.02	53.21	47.50	46.64	48.75
Direct labor:														
Wages	2.39	7.69	4.84	13.09	2.30	24.82	24.56	1.32	16.01	3.29	21.22	20.26	2.45	24.18
Paid to contractors	23.63	20.18	27.36	6.40	27.37	6.63	.09	25.83	4.52	28.12	11.62	1.59	36.49	5.04
Total direct labor	26.02	27.87	32.20	19.49	29.67	31.45	24.65	27.15	20.53	31.41	32.84	21.85	38.94	29.22
Indirect labor:														
Salaries of officials	.49	.....	.63	1.12	.63	1.44	.43	.37	2.37	.46	1.07	.75	.18	1.49
Wages	1.79	1.31	1.88	2.01	.67	1.08	3.08	1.98	5.93	1.52	3.63	6.54	.92	3.09
Total indirect labor	2.28	1.31	2.51	3.13	1.30	2.52	3.51	2.35	8.30	1.98	4.70	7.29	1.10	4.58
Factory expense:														
Rent	.29	.77	1.58	.30	.70	2.04	1.00	.89	.40	.64	.88	1.16	1.22	1.74
Power, light, heat	.12	.16	.14	.59	.06	.26	.26	.08	.52	.07	.44	.60	.05	.....
Repairs on equipment	.....	.05	.06	.18	.....	.15	.06	.....	.74	.03	.03	.24	.05	.06
Fire insurance	.24	.26	.33	.57	.61	.25	.38	.44	.24	.11	.83	.16	.30	.....
Insurance, other kinds	.....	.....	.09	.25	.....	.....	.....	.22	.....	.....	.....	.15	.....	.....
Workmen's compensation or employer's liability	.14	.01	.....	.....	.03	.04	.05	.01	.....	.....	.01	.09	.....	.04
Welfare work	.....	.....	.....	.07	.....	.....	.....	.....	.46	.....	.07	.....	.....	.04
Taxes, State and local	.....	.....	.....	.04	.....	.....	.....	.....	.33	.....	.....	.45	.....	.13
Other factory expense	.02	.34	.10	.11	.22	.28	.....	.....	.26	.39	.26	.80	.33	.11
Total factory expense	.81	1.59	2.30	2.11	1.62	3.02	1.75	1.64	2.95	1.24	2.52	3.65	1.95	2.12
Administrative expense:														
Salaries of officials	.97	1.06	1.26	1.18	.73	.72	.43	.93	1.52	.47	.44	.75	.37	1.67
Salaries of office force	.24	1.44	.38	.67	.36	.98	.57	.22	.55	.40	1.17	1.34	.92	.31
Rent, general office	.08	.07	.07	.07	.04	.11	.02	.04	.06	.02	.27	.15	.06	.21
Office expense	.20	.28	.33	.36	.24	.73	.13	.10	.27	.24	.27	.34	.43	.35
Collection expense	.05	.10	.06	.28	.11	.06	.....	.....	.....	.09	.....	.26	.20	.09
Bad debts	1.22	1.09	1.25	4.01	2.50	1.93	.24	.33	.34	.34	.02	.94	1.83	2.14
Corporation tax	.....	.....	.....	.08	.....	.....	.....	.....	.....	.....	.....	.21	.....	.07
Other administrative expense	.15	.17	.10	.24	.22	1.20	.77	.38	.41	.14	.38	.51	.44	.32
Total administrative expense	2.91	4.21	3.45	6.89	4.20	5.73	2.16	2.00	3.15	1.70	2.55	4.50	4.25	5.16
Selling expense:														
Salaries of officials	2.97	.70	1.26	1.18	.74	.80	2.16	.73	.41	1.29	1.17	1.20	.93	.77
Salaries, commission, and expense of salesmen	2.11	5.08	1.28	6.07	3.13	6.69	1.63	.95	4.96	5.71	1.16	7.09	5.15	8.32
Wages	.....	.....	.....	.....	.18	.....	.....	.....	.....	.....	.....	.10	.....	.....
Rent, show, and shipping rooms	.15	.02	.21	.30	.05	.78	.02	.06	.02	.07	.20	.06	.25	.15
Packing materials	.08	.23	.16	.40	.30	.16	.11	.12	.16	.11	.16	.17	.40	.24
Cartage and freight outward	23	28	.17	.58	.19	.56	.20	.14	.79	.37	.20	.25	.15	.21
Advertising	.04	.05	.11	.09	.05	1.90	.08	.....	2.30	.04	.10	5.04	.....	.39
Other selling expense	.....	.....	.10	.23	.22	.....	.....	.07	.09	.06	1.10	1.30	.24	.09
Total selling expense	5.58	6.36	3.29	8.85	4.86	10.89	4.20	2.07	8.73	7.65	4.18	15.21	7.12	10.17

TABLE 20.—PERCENTAGES OF COSTS, BY SPECIFIED ITEMS, BASED ON THE TOTAL MANUFACTURING AND SELLING EXPENSE, ARRANGED BY ESTABLISHMENTS IN THE ORDER OF THEIR MANUFACTURING PROFITS FROM THE HIGHEST TO THE LOWEST AND OF LOSSES FROM THE LOWEST TO THE HIGHEST—Continued.

Items.	No. 46.	No. 38.	No. 5.	No. 14.	No. 17.	No. 2.	No. 47.	No. 6.	No. 35.	No. 26.	No. 48.	No. 34.	No. 57.	No. 23.
	Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
Total manufacturing and selling expense	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Raw materials	54.48	49.97	64.77	49.98	51.52	58.39	56.36	51.32	49.68	49.44	52.38	45.96	53.44	48.47
Direct labor:														
Wages	.....	20.12	22.17	20.08	32.06	23.35	5.17	29.86	18.97	9.82	2.95	21.66	1.75	28.12
Paid to contractors	26.35	8.58	.....	4.78	5.16	1.36	23.08	1.93	13.41	22.03	26.61	6.29	27.87	7.10
Total direct labor	26.35	28.70	22.17	24.86	37.22	24.71	28.25	31.79	32.38	31.85	29.56	27.95	29.62	35.22
Indirect labor:														
Salaries of officials	.48	.59	.53	1.13	.62	1.15	.79	1.59	.58	.63	.....	.59	.62	.....
Wages	1.80	3.10	2.00	3.85	1.03	1.70	1.67	3.59	3.14	2.94	1.66	5.43	3.17	5.31
Total indirect labor	2.28	3.69	2.53	4.98	1.65	2.85	2.46	5.18	3.72	3.57	1.66	6.02	3.79	5.31
Factory expense:														
Rent	1.21	.61	1.39	1.51	.52	1.60	.79	.86	.70	1.13	1.10	1.43	1.00	1.21
Power, light, heat	.93	.44	.38	.26	.34	.49	.27	.45	.43	.06	.10	.55	.09	.21
Repairs on equipment	.....	.23	.11	.15	.06	.21	.....	.37	.24	.06	.....	.21	.....	.04
Fire insurance	.35	.19	.28	.10	.22	.23	.16	.34	.07	.07	.30	.18	.45	.37
Insurance, other kinds	.....	.25	.01	.01	.....	.....	.....	.....	.06	.47	.....	.....	.01	.01
Workmen's compensation or employers' liability	.....	.02	.06	.07	.31	.18	.....	.14	.03	.03	.05	.05	.01	.06
Welfare work	.09	.....	.....	.....	.02	.....	.07	.....	.14	.....	.....	.20	.....	.13
Taxes, State and local	.01	.20	.....	.26	.....	.....	.....	.....	.13	.....	.....	.15	.....	.....
Other factory expense	.05	.41	.28	.41	.10	1.18	.12	.20	.....	.....	.08	.68	.....	.60
Total factory expense	2.64	2.35	2.51	2.77	1.57	3.89	1.41	2.36	1.80	1.82	1.63	3.45	1.56	2.63
Administrative expense:														
Salaries of officials	.73	1.12	1.08	.76	.62	1.32	1.19	.79	.33	.63	1.13	.59	.62	.....
Salaries of office force	.91	.94	.38	1.06	1.35	.50	.72	.54	.31	.31	1.08	.95	.82	1.19
Rent, general office	.05	.05	.03	.15	.11	.09	.10	.....	.06	.24	.07	.21	.05	.08
Office expense	.17	.25	.23	.56	.49	.24	.25	.36	.....	.37	.25	.49	.19	.24
Collection expense	.16	.17	.04	.10	.08	.....	.06	.13	.04	.....	.19	.....	.....	.....
Bad debts	2.66	1.51	.93	3.16	.49	.06	1.91	1.52	.48	.32	1.92	1.43	4.06	.95
Corporation tax	.....	.....	.04	.....	.....	.....	.....	.12	.01	.....	.....	.05	.16	.....
Other administrative expense	.25	.68	.29	.12	.16	.....	.19	.34	.83	1.83	.....	.77	.07	.35
Total administrative expense	4.93	4.72	3.02	5.91	3.30	2.21	4.42	3.79	2.06	4.20	4.64	4.49	5.97	2.81
Selling expense:														
Salaries of officials	1.21	.75	1.61	1.13	.62	1.79	1.98	1.49	.15	.63	.76	1.76	.62	2.75
Salaries, commission, and expense of salesmen	6.83	6.66	2.65	8.78	2.25	4.01	3.32	3.37	6.13	6.23	8.16	7.22	4.28	1.47
Wages	.....	.36	.....	.....	.62	.89	.....	.....	.66	.....	.....	.14	.....	.....
Rent, show, and shipping rooms	.49	.37	.03	.15	.26	.09	.10	.....	.19	.24	.15	.21	.05	.23
Packing materials	.07	.21	.16	.13	.21	.25	.16	.16	.....	1.35	.57	.12	.31	.19
Cartage and freight outward	.20	.30	.27	.04	.20	.29	.16	.31	.30	.40	.24	.36	.36	.18
Advertising	.36	.95	.....	1.27	.37	.26	.99	.23	2.93	.24	.....	1.84	.....	.03
Other selling expense	.16	.97	.28	.....	.21	.37	.39	.....	.....	.03	.25	.48	.....	.71
Total selling expense	9.32	10.57	5.00	11.50	4.74	7.95	7.10	5.56	10.36	9.12	10.13	12.13	5.62	5.56

TABLE 20.—PERCENTAGES OF COSTS, BY SPECIFIED ITEMS, BASED ON THE TOTAL MANUFACTURING AND SELLING EXPENSE, ARRANGED BY ESTABLISHMENTS IN THE ORDER OF THEIR MANUFACTURING PROFITS FROM THE HIGHEST TO THE LOWEST AND OF LOSSES FROM THE LOWEST TO THE HIGHEST—Continued.

Items.	No. 28.	No. 39.	No. 8.	No. 24.	No. 30.	No. 21.	No. 49.	No. 16.	No. 63.	No. 53.	No. 13.	No. 7.	No. 10.	No. 61.
	Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
Total manufacturing and selling expense	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Raw materials	55.06	47.74	52.84	44.31	52.35	49.06	48.06	44.72	54.55	51.10	47.42	41.31	45.87	54.01
Direct labor:														
Wages	7.65	28.34	25.31	28.05	12.25	18.55	10.57	16.66	3.82	.....	11.50	28.33	6.35	10.76
Paid to contractors	24.14	3.70	1.56	5.88	15.71	12.70	14.79	11.52	22.49	31.09	16.64	2.17	27.16	16.95
Total direct labor	31.79	32.04	26.87	33.93	27.96	31.25	25.36	28.18	26.31	31.09	28.14	30.50	33.51	27.71
Indirect labor:														
Salaries of officials	.76	.58	1.55	1.57	.45	.99	1.51	.....	.75	.50	.45	.....	.53	.73
Wages	1.77	4.66	4.15	4.18	3.21	3.24	3.13	3.93	3.93	1.78	3.84	5.89	3.56	3.53
Total indirect labor	2.53	5.24	5.70	5.75	3.66	4.23	4.64	3.93	4.68	2.28	4.29	5.89	4.09	4.26
Factory expense:														
Rent	1.41	1.48	1.05	1.31	1.17	2.59	2.52	1.65	1.24	1.38	.76	2.24	.84	1.09
Power, light, heat	.15	.22	.32	.28	.....	.29	1.07	.19	.13	.38	.45	.44	.....	.13
Repairs on equipment	.....	.11	.28	.05	.26	.27	.....	.....	.02	.05	.10	.17	.32	.....
Fire insurance	.20	.35	.54	.22	.07	.23	.30	.52	.08	.37	.25	.18	.19	.31
Insurance, other kinds	.60	.01	.01	.01	.....	.....	.....	.....	.....	.05	.....	.01	.18	.....
Workmen's compensation or employer's liability	.03	.03	.03	.05	.02	.06	.01	.....	.02	.02	.03	.11	.06	.06
Welfare work	.....	.22	.09	.....	.....	.....	.....	.....	.....	.....	.02	.....	.....	.....
Taxes, State and local	.....	.04	.29	.....	.05	.....	.01	.....	.....	.....	.17	.....	.....	.....
Other factory expense	.30	.31	.09	.33	.....	.87	.....	.....	1.36	.52	.10	.....	.49	2.07
Total factory expense	2.69	2.77	2.70	2.25	1.57	4.31	3.91	2.36	2.85	2.77	1.88	3.15	2.08	3.66
Administrative expense:														
Salaries of officials	.76	.58	1.55	1.57	.67	.99	1.51	3.79	.75	.66	.90	1.78	.67	.06
Salaries of office force	.88	1.56	1.27	.51	1.25	1 21	1.46	2.22	1.00	1.08	3.05	1.61	.64	.43
Rent, general office	.06	.14	.10	.34	.23	.23	.19	.25	.07	.05	.09	.56	.23	.02
Office expense	.13	.31	.36	.27	.39	.37	.24	.....	.42	.19	.37	.90	.42	.25
Collection expense	.02	.08	.12	.....	.22	.06	.....	.....	.05	.05	.....	.04	.09	.02
Bad debts	.....	.53	.75	.29	1.07	.49	3.63	1.87	.68	.77	2.26	.84	.62	.44
Corporation tax	.....	.04	.02	.....	.....	.....	.....	.....	.....	.....	.....	.02	.....	.....
Other administrative expense	.30	.62	.09	.49	.04	.03	.02	3.10	.25	.27	.28	.73	.69	1.02
Total administrative expense	2.15	3.86	4.26	3.47	3.92	3.38	6.45	11.23	3.22	3.07	6.95	6.48	3.36	2.24
Selling expense:														
Salaries of officials	1.52	1.16	1.54	.....	.56	1.97	3.02	.....	.75	1.00	1.35	2.03	.67	.55
Salaries, commission, and expense of salesmen	3.33	4.77	4.28	8.09	8.19	3.93	6.77	8.81	6.27	7.09	7.96	7.22	6.06	6.40
Wages	.....	.....	.44	.18	.....	.....	.....	.....	.06	.20	.....	.66	.58	.....
Rent, show and shipping rooms	.12	.14	.45	1.20	.28	.69	.19	.....	.11	.19	.22	.56	.52	.02
Packing materials	.21	.13	.14	.25	.37	.14	.19	.....	.30	.32	.12	.34	.19	.27
Cartage and freight outward	.25	.32	.25	.27	.39	.15	.20	.35	.61	.41	.21	.44	.18	.45
Advertising	.05	1.28	.03	.30	.50	.89	.56	.42	.24	.08	1.26	.94	2.11	.43
Other selling expense	.30	.55	.50	.....	.25	.....	.65	.....	.05	.40	.20	.48	.78	.....
Total selling expense	5.78	8.35	7.63	10.29	10.54	7.77	11.58	9.58	8.39	9.69	11.32	12.67	11.09	8.12

TABLE 20.—PERCENTAGES OF COSTS, BY SPECIFIED ITEMS, BASED ON THE TOTAL MANUFACTURING AND SELLING EXPENSE, ARRANGED BY ESTABLISHMENTS IN THE ORDER OF THEIR MANUFACTURING PROFITS FROM THE HIGHEST TO THE LOWEST AND OF LOSSES FROM THE LOWEST TO THE HIGHEST—Continued.

Items.	No. 31.	No. 54.	No. 37.	No. 15.	No. 29.	No. 36.	No. 18.	No. 44.
	Per ct. 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00
Total manufacturing and selling expense								
Raw materials	43.58	43.71	49.97	49.27	52.53	47.03	45.14	52.99
Direct labor:								
Wages	31.83	4.88	28.46	20.30	11.51	27.50	16.35	4.84
Paid to contractors	4.15	31.01	5.11	7.61	18.28	6.65	10.08	23.60
Total direct labor	35.98	35.89	33.57	27.91	29.79	34.15	26.43	28.44
Indirect labor:								
Salaries of officials	.37	.65	.31	1.28	.54	.....	.72	.57
Wages	5.67	4.18	2.12	4.43	2.96	2.76	4.18	2.45
Total indirect labor	6.04	4.83	2.43	5.71	3.50	2.76	4.90	3.02
Factory expense:								
Rent	2.95	1.50	.58	1.45	1.37	1.14	1.38	1.62
Power, light, heat	.49	.44	.37	.48	.42	.52	.74	.12
Repairs on equipment	.....	.....	.02	.13	.04	.17	.04	.....
Fire insurance	.38	.65	.10	.28	.45	.23	.15	.30
Insurance, other kinds	.09	.....	.....	.06	.....	.....	.....	.12
Workmen's compensation, or employers' liability	.07	.02	.03	.12	.02	.....	.04	.04
Welfare work	.....	.....	.20	.32	.04	.06	.04	.....
Taxes, State and local	.....	.....	.11	.25	.10	.36	.17	.....
Other factory expense	.69	.57	.....	.22	.04	.41	.14	.25
Total factory expense	4.67	3.18	1.41	3.31	2.48	2.89	2.70	2.45
Administrative expense:								
Salaries of officials	.75	.64	.31	1.28	1.07	.49	.44	.76
Salaries of office force	.47	1.16	1.23	1.09	1.26	.38	1.13	.88
Rent, general office	.10	.22	.07	.64	.15	.41	.25	.10
Office expense	.27	.18	.35	.33	.55	.27	.97	.29
Collection expense	.....	.....	.11	.06	.04	.04	.27	.....
Bad debts	1.14	.20	1.87	1.58	1.67	.57	2.61	1.72
Corporation tax	.....	.....	.....	.....	.....	.01	.07	.....
Other administrative expense	.60	.17	.....	.60	.21	.81	.98	.40
Total administrative expense	3.33	2.57	3.94	5.58	4.95	2.98	6.72	4.15
Selling expense:								
Salaries of officials	1.13	1.29	.35	1.28	.54	.....	.28	2.47
Salaries, commission, and expense of salesmen	3.89	7.10	4.89	5.94	5.39	5.89	11.82	5.26
Wages	.14	.....	1.56	.39	.....	.52	.....	.....
Rent, show and shipping rooms	.19	.22	.14	.16	.09	.26	.13	.15
Packing materials	.17	.20	.16	.09	.21	.19	.22	.23
Cartage and freight outward	.29	.30	.09	.14	.40	.30	.48	.23
Advertising	.59	.71	1.39	.21	.05	2.74	.29	.15
Other selling expense	.....	.....	.....	.01	.07	.38	.89	.46
Total selling expense	6.40	9.82	8.68	8.22	6.75	10.19	14.11	8.95

It should not be assumed that an establishment whose proportion of expenditure for labor was lower than that of other establishments pays its employees less than the others. On the contrary, the earnings of individual employees might even be greater in the establishment with a low percentage of labor cost, because of several reasons: (a) The fact that the employees were more skilled than ordinary employees; (b) better superintendence or superior shop arrangements enabled them to turn out a larger product per worker than could be done by workers in factories less efficiently managed. Furthermore, if the percentage for overhead were unusually high, it would proportionately decrease the percentage of labor and other expense, without necessarily indicating that lower wages were paid.

Selling expense, the next most important item of cost, varied from 15.21 per cent for establishment No. 11 to 1.64 per cent for establishment No. 32. Only one establishment shows a total selling expense of more than 15 per cent of the total cost, 19 establishments show percentages of over 10 per cent but less than 15 per cent, and 34 show 5 per cent or more but less than 10 per cent, and 10 show less than 5 per cent.

Of the 64 establishments, 10 show no expenditures for advertising, while 54 report such expenditures ranging from two-hundredths of 1 per cent to 5.04 per cent of the total cost.

Indirect labor, factory expense, and administrative expense vary in importance in the different establishments, and no definite statement can be made as to which of the three bears a relatively higher proportion of the total cost.

In the discussion of Table 19 it is shown what effect the employment of contract labor has upon direct labor, indirect labor, and factory expense, and this factor must be considered in comparing individual establishments. A reference to the details under direct labor in Table 20 will show whether or not an establishment employs contract labor and the extent of such employment. An examination of the individual items of cost under factory expense will show that only 23 establishments report expenditures for welfare work. If any welfare work is done by the other establishments it is conducted in such a manner that the expenditures are not chargeable to the cost of production.

Another item of cost under factory expense not common to all of the establishments is that of taxes, owing to the fact that in some States manufacturers are exempt from taxation except on their real estate, and in case a manufacturer owns real estate employed in his business all expenses in connection with such property are eliminated from the costs and a rental charge substituted.

The percentage of bad debts, as is natural, varies greatly, being highest in establishment No. 57, with 4.06 per cent. Establishments Nos. 26 and 27 show no losses from bad debts on the year's business. It requires a credit man of unusual foresight to prevent all losses from this source. Some establishments are so anxious to dispose of their product that they are willing to assume almost any risk to secure orders, and consequently their losses are out of proportion to the amount of their business.

Some salesmen, to increase their commissions and to prevent their company from refusing the orders of certain customers, do not always inform the company of all the facts that they may learn relating to the financial condition of such customers, which, if in the possession of the home office, would result in the rejection of orders. Salesmen sometimes sell a customer more than his business demands, which may not only result in a cancellation of the order by the customer, but may force the customer into bankruptcy, for should he be a free buyer in other lines he will not be in a position to meet his bills when they become due. Salesmen could and should be of great assistance to the credit man, and while undoubtedly many establishments require their salesmen to supply additional credit information, there are some establishments whose losses from bad debts could be reduced if their salesmen were not interested solely in securing orders regardless of the ability of the customer to pay his bills.

TOTAL DIRECT AND INDIRECT LABOR.

The table that follows resembles Table 20, in that it shows, by groups, percentages based on the total manufacturing and selling expense. In this table, however, direct labor, indirect labor (except salaries of officials), and wages under selling expense are combined; also, separate combinations are made for the items of rent, insurance (except fire), workmen's compensation, taxes, and salaries of office force and office expense.

TABLE 21.—PERCENTAGES OF AVERAGE COSTS, BY SPECIFIED ITEMS, BASED ON THE TOTAL MANUFACTURING AND SELLING EXPENSE, BY GROUPS OF ESTABLISHMENTS.

Items.	All establishments reporting (64).	Establishments having—			Establishments with factory price of units—			Establishments making separate trousers, etc., Group VII (8).
		No operating contracted, Group I (12).	Part operating contracted, Group II (30).	All operating contracted, Group III (22).	Under $8, Group IV (8).	$8 and under $15, Group V (37).	$15 and over, Group VI (11).	
Total manufacturing and selling expense	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00	*Per ct.* 100.00
Raw materials	52.39	50.89	50.91	56.75	58.73	52.88	46.68	55.87
Labor	32.85	32.00	33.96	30.90	30.33	32.12	38.09	29.01
Salaries of officials	2.41	2.66	2.34	2.43	2.64	2.44	2.15	2.67
Salaries, commission, and expense of salesmen	5.01	5.55	5.01	4.63	3.27	5.18	4.76	5.72
Rent	1.29	1.46	1.34	1.04	.99	1.11	1.92	1.51
Power, light, heat	.32	.35	.38	.16	.24	.33	.33	.25
Repairs	.13	.23	.15	.02	.06	.14	.17	.05
Fire insurance	.22	.23	.21	.24	.33	.20	.26	.24
Insurance, except fire	.07	.14	.07	.04	.09	.06	.12	.04
Packing cases, etc	.21	.28	.19	.20	.22	.19	.25	.26
Cartage, freight, outward	.32	.28	.33	.33	.23	.33	.28	.48
Salaries of clerks and office expense	1.12	1.27	1.14	.96	.90	1.09	1.19	1.35
Collection expense	.06	.12	.05	.06	.06	.07	.05	.07
Bad debts	.88	.95	.78	1.06	1.30	.90	.65	.87
Taxes	.13	.25	.13	.01	.11	.14	.11	.05
Advertising	1.25	1.59	1.60	.25	.01	1.45	1.39	.21
All other expenses	1.34	1.75	1.41	.92	.49	1.37	1.60	1.35

TABLE 21.—PERCENTAGES OF AVERAGE COSTS, BY SPECIFIED ITEMS, BASED ON THE TOTAL MANUFACTURING AND SELLING EXPENSE, BY GROUPS OF ESTABLISHMENTS—Continued.

Items.	Establishments located in—						
	Chicago, Group VIII (4).	Philadelphia, Group IX (7).	Cleveland and Milwaukee, Group X (4).	Rochester, Group XI (7).	Baltimore, Group XII (6).	New York City, Group XIII (30).	Cincinnati, Group XIV (6).
Total manufacturing and selling expense	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00
Raw materials	47.37	54.15	53.48	51.24	51.89	54.50	52.32
Labor	35.17	29.45	26.87	35.36	33.01	32.52	32.85
Salaries of officials	2.08	3.06	3.75	2.19	1.82	2.48	2.39
Salaries, commission, and expense of salesmen	5.01	5.66	5.80	4.49	5.89	4.55	5.86
Rent	1.59	1.23	.89	1.03	1.05	1.41	1.48
Power, light, heat	.52	.50	.54	.35	.34	.15	.28
Repairs	.11	.06	.53	.12	.16	.06	.11
Fire insurance	.21	.38	.23	.16	.18	.24	.22
Insurance, except fire	.03	.06	.09	.07	.09	.10	.03
Packing cases, etc	.14	.20	.17	.22	.20	.24	.23
Cartage, freight, outward	.31	.29	.56	.33	.21	.32	.25
Salaries of clerks and office expense	1.26	1.23	1.17	.72	1.35	1.04	1.64
Collection expense	.05	.17	.09	.03	.13	.04	.09
Bad debts	.48	1.80	.68	.54	1.34	.91	1.21
Taxes	.18	.02	.46	.13	.20	.01	.17
Advertising	3.18	.89	3.04	1.53	.84	.37	.27
All other expenses	2.31	.85	1.65	1.49	1.30	1.06	.60

Items.	Establishments with net sales of—			
	Under $500,000, Group XV (27).	$500,000 and under $1,000,000, Group XVI (14).	$1,000,000 and under $2,000,000, Group XVII (14).	$2,000,000 and over, Group XVIII (9).
Total manufacturing and selling expense	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00
Raw materials	53.23	52.70	50.94	53.08
Labor	30.93	33.45	34.07	32.36
Salaries of officials	3.10	2.78	1.91	2.43
Salaries, commission, and expense of salesmen	5.42	4.53	5.34	4.79
Rent	1.66	1.69	1.38	.96
Power, light, heat	.35	.26	.31	.33
Repairs	.08	.11	.15	.15
Fire insurance	.36	.30	.20	.16
Insurance, except fire	.08	.14	.09	.03
Packing cases, etc	.21	.27	.22	.18
Cartage, freight, outward	.26	.31	.28	.38
Salaries of clerks and office expense	1.35	1.20	1.03	1.07
Collection expense	.09	.04	.08	.06
Bad debts	1.53	.99	.81	.69
Taxes	.08	.06	.16	.14
Advertising	.33	.27	1.60	1.63
All other expenses	.94	.90	1.43	1.56

Table 22, the figures for which were obtained from the Bureau of the Census, shows that in 1909 the total cost of labor, made up of salaries and wages, 25.71 and contract work, 9.31 per cent, was 35.02 per cent of the total cost. The table gives the amounts and percentages of specified items of expense and the total value of products in the men's clothing industry in the United States, for the year 1909.

TABLE 22.—AMOUNTS AND PERCENTAGES OF SPECIFIED ITEMS OF EXPENSE FOR THE MEN'S CLOTHING INDUSTRY IN THE UNITED STATES, AS REPORTED BY THE CENSUS OF MANUFACTURES, 1909.

[Data from the records of the Bureau of the Census.]

Items of expense.	Amount.	Per cent.	Items of expense.	Amount.	Per cent.
Salaries and wages:			Miscellaneous:		
Officers	$3,180,434	0.73	Rent of factory	$5,391,588	1.23
Superintendents and managers	3,572,338	.81	Taxes	526,128	.12
Clerks and salesmen	16,329,365	3.72	Rent of offices and sundries	26,513,317	6.04
Wage earners	89,644,921	20.45	Contract work	40,807,991	9.31
Total	112,727,058	25.71	Total	73,239,024	16.70
Materials:			Total cost	438,488,649	100.00
All except fuel and mill supplies	249,440,553	56.89	Value of products	485,677,493	.....
Fuel and power	1,789,297	.41			
Freight	1,292,717	.29			
Total	252,522,567	57.59			

SALES AND PROFITS IN PREVIOUS YEARS.

An attempt was made to obtain from as many establishments as possible the amount of their net sales not only for their last business year but also for previous years. The object was to compare the net sales in previous years with those of the last year. The percentages of sales in years previous to 1914, based on the sales in that year, are shown, so far as data were obtained, in the following table:

TABLE 23.—PERCENTAGES OF NET SALES OF ESTABLISHMENTS DURING YEARS PRIOR TO 1914, BASED ON NET SALES DURING THAT YEAR.

Establishments.	1908	1909	1910	1911	1912	1913	1914
No. 1	59.02	89.76	101.25	82.72	103.90	133.41	100.00
No. 11	112.01	137.32	129.92	119.14	118.79	118.90	100.00
No. 14	96.97	104.33	96.70	94.86	98.30	110.76	100.00
No. 15	.....	175.66	142.07	128.75	126.42	153.85	100.00
No. 30	.....	89.01	91.24	91.48	93.74	117.17	100.00
No. 34	.....	114.65	109.50	93.26	99.14	113.15	100.00
No. 12	.....	.....	41.79	55.62	74.46	92.20	100.00
No. 38	.....	.....	116.54	116.35	108.68	116.43	100.00
No. 39	.....	.....	124.57	115.44	110.97	112.83	100.00
No. 46	.....	.....	82.50	75.02	94.29	94.12	100.00
No. 7	.....	.....	.....	109.81	100.58	97.96	100.00
No. 13	.....	.....	.....	109.81	82.49	110.28	100.00
No. 55	.....	.....	.....	75.79	73.68	99.49	100.00
No. 63	.....	.....	.....	94.03	91.32	101.07	100.00
No. 19	.....	.....	.....	.....	65.41	95.30	100.00
No. 25	.....	.....	.....	.....	95.94	114.71	100.00
No. 42	.....	.....	.....	.....	89.16	102.96	100.00
No. 47	.....	.....	.....	.....	65.98	94.33	100.00
No. 49	.....	.....	.....	.....	118.00	114.78	100.00
No. 59	.....	.....	.....	.....	121.42	99.73	100.00
No. 18	.....	.....	.....	.....	.....	118.82	100.00
No. 29	.....	.....	.....	.....	.....	112.38	100.00
No. 37	.....	.....	.....	.....	.....	120.29	100.00
No. 45	.....	.....	.....	.....	.....	112.90	100.00
Average, 3 establishments	90.54	110.84	105.97	97.03	98.88	102.69	100.00
Average, 6 establishments	.....	109.26	104.14	94.79	97.56	108.96	100.00
Average, 10 establishments	.....	.....	100.21	96.80	99.68	109.83	100.00
Average, 14 establishments	.....	.....	.....	98.08	99.00	109.33	100.00
Average, 20 establishments	.....	.....	.....	.....	96.82	109.13	100.00
Average, 24 establishments	.....	.....	.....	.....	.....	111.39	100.00

The average net sales of the establishments that furnished data for years previous to 1914 were less in that year than in 1909, 1910, or 1913, but larger than in 1908, 1911, or 1912.

The percentages of profit of these establishments based on their net sales during each year from 1908 to 1914 appear in the following table:

TABLE 24.—PERCENTAGES OF FINAL PROFIT BASED ON NET SALES OF ESTABLISHMENTS EACH YEAR FROM 1908 TO 1914.

Establishments.	1908	1909	1910	1911	1912	1913	1914
No. 1	4.42	11.09	8.93	2.54	5.16	13.14	9.67
No. 11	5.34	8.73	2.92	4.15	7.60	7.90	4.90
No. 14	.69	1.79	a 1.63	1.47	4.10	4.97	1.21
No. 15	.....	7.29	1.93	a 2.28	.95	6.57	2.84
No. 30	.....	6.67	2.32	3.60	3.40	a 1.72	3.25
No. 34	.....	2.69	1.53	1.19	3.82	4.04	2.28
No. 12	.....	.....	5.17	7.70	9.07	6.60	6.73
No. 38	.....	.....	11.25	9.64	10.08	6.13	5.75
No. 39	.....	.....	9.89	5.81	5.83	3.56	1.09
No. 46	.....	.....	6.53	a 2.28	7.78	6.89	3.55
No. 7	.....	.....	.....	3.74	1.72	a 5.96	3.08
No. 13	.....	.....	.....	4.04	a 4.34	6.73	1.77
No. 55	.....	.....	.....	5.37	5.70	3.96	5.35
No. 63	.....	.....	.....	1.54	4.53	1.83	1.56
No. 19	.....	.....	.....	.....	4.54	5.19	5.28
No. 25	.....	.....	.....	.....	6.97	6.57	7.56
No. 42	.....	.....	.....	.....	9.89	7.53	10.39
No. 47	.....	.....	.....	.....	5.51	6.53	8.23
No. 49	.....	.....	.....	.....	9.65	5.07	.39
No. 59	.....	.....	.....	.....	6.06	6.98	2.94
No. 18	.....	.....	.....	.....	.....	2.01	a 1.04
No. 29	.....	.....	.....	.....	.....	1.84	a 1.83
No. 37	.....	.....	.....	.....	.....	2.08	2.40
No. 45	.....	.....	.....	.....	.....	2.32	4.71
Average, 3 establishments	4.30	9.06	3.12	3.64	6.93	8.33	4.21
Average, 6 establishments	.....	6.87	2.45	2.45	4.95	5.35	3.08
Average, 10 establishments	.....	.....	6.28	5.13	6.80	5.69	3.94
Average, 14 establishments	.....	.....	.....	4.56	6.04	4.62	3.67
Average, 20 establishments	.....	.....	.....	.....	6.75	5.60	5.42
Average, 24 establishments	.....	.....	.....	.....	.....	5.21	4.92

a Loss.

As shown by this table, the average percentages of profit in 1914 were smaller than in 1912 or 1913, and in some cases were smaller and in other cases larger than during the years 1908 to 1911.

CHAPTER III.

COST AND PROFIT BY SPECIFIED UNITS.

The manufacturers that furnished data in regard to their total production and net sales for a year were requested also to supply data in regard to the cost of production of specific styles of suits, overcoats, and separate trousers. Each was requested to give details about units of different grades, including representative styles that constituted the bulk of the sales for the year. In each case the unit of cost is one three-piece suit, a single overcoat, or a pair of trousers. Forty-eight establishments furnished data regarding 210 units.

Table 25 shows, by grades and cities, the number of establishments supplying unit data, and the number of styles reported.

TABLE 25.—NUMBER OF ESTABLISHMENTS REPORTING DATA REGARDING UNITS, AND NUMBER OF STYLES REPORTED.

Cities, garments, and grades.	Establishments reporting.	Styles reported.	Cities, garments, and grades.	Establishments reporting.	Styles reported.
Three-piece suits with gross selling price of—			Overcoats with gross selling price of—Continued.		
Under $8—			Under $8—		
New York City	10	11	Philadelphia	1	1
Philadelphia	3	4	Baltimore	1	1
Baltimore	1	1	Cincinnati, Cleveland, and Milwaukee	1	1
Cincinnati, Cleveland, and Milwaukee	2	2	$8 and under $15—		
$8 and under $15—			New York City	9	13
New York City	18	32	Rochester	2	2
Rochester	5	9	Chicago	2	2
Chicago	3	6	Philadelphia	3	4
Philadelphia	5	15	Baltimore	3	4
Baltimore	4	8	Cincinnati, Cleveland, and Milwaukee	4	6
Cincinnati, Cleveland, and Milwaukee	5	13	$15 and over—		
$15 and over—			New York City	3	3
New York City	3	6	Rochester	3	3
Rochester	5	14	Chicago	2	3
Chicago	4	16	Baltimore	1	1
Philadelphia	1	1	Separate trousers with gross selling price of—		
Baltimore	2	3	Under $2.75—		
Cincinnati, Cleveland, and Milwaukee	3	3	New York City	5	10
Overcoats with gross selling price of—			Philadelphia	1	1
Under $8—			$2.75 and over—		
New York City	4	4	New York City	3	7

The data relating to the cost of manufacturing the specified units submitted are presented in the following series of tables, numbered 26 to 36, inclusive.

COST AND PROFIT OF UNITS SOLD TO RETAILERS.

Table 26 shows the principal items of cost and the manufacturing profit or loss for different kinds of garments and for various styles of the same kind. The data for each separate group are arranged

according to the gross selling price to the retailer, the styles with the highest prices being entered first. Where there are data for two or more styles in the same group, with the same gross price, the style with the highest net price is entered first. Where, however, there are data for two or more styles with the same gross and net prices, they are entered according to the amount of profit, the unit showing the greatest amount of profit being entered first.

The difference between the gross selling price and the net price, as shown in the table, was the usual discount allowed by the manufacturer to his customers. This discount varied from 2 to 10 per cent, according to the establishment and class of trade, and was larger than the discount actually taken.

In each case the usual price at which the unit is retailed is also given. These figures were obtained from the manufacturer and can not be considered absolutely accurate. However, they tend to show in a general way at what price the garments are sold to the consuming public. The manufacturer usually knows what his customer can get for a certain garment. These retail prices are the usual prices at which the garments are ordinarily sold when first put on sale and not the prices during reduction sales.

The manufacturer estimates the cost of making a style as closely as possible when samples of the style are made. After the first lot of any style has been produced the manufacturer knows the quantity of materials entering into the unit and can therefore figure the cost with a degree of accuracy.

The cost of direct labor in plants where the employees are piece workers is known definitely, as is the case also when the product is sent to be made up in contract shops, the contractor receiving a stipulated piece-rate price. In establishments where the employees are time workers, the determination of the labor cost is more difficult and requires a good deal of calculation. In this industry the cost of labor by time workers is usually determined by the quantity method, i. e., dividing the amount of pay by the number of suits or garments produced.

The salaries of active officers or partners or the amount that individual owners would have paid for services that they themselves performed were entered under indirect labor, or administrative or selling expense, according to the nature of the work performed.

The "overhead" charges on all units specified in this report were computed according to a uniform method which is explained under the subhead "The dual method," in a section of the report headed "Simplified cost accounting" (p. 223).

The costs of materials of the units specified in the tables were based on the cost and prices of materials during the summer and fall of 1914 for spring goods and during the winter and spring of 1914–15 for winter goods.

Table 26, which follows, shows the cost of production, selling price, and profit or loss, per garment sold to retailers, for the 210 styles for which data were secured.

TABLE 26.—COST OF PRODUCTION, SELLING PRICE, AND PROFIT OR LOSS PER SUIT, OVERCOAT, OR PAIR OF TROUSERS SOLD TO RETAILERS.

[NOTE.—The styles are designated by letters for convenience of reference to other tables. The same letter applied to the product of different establishments does not indicate identity or even similarity of style.]

THREE-PIECE SUITS.

Establishment No.	Styles.	Where made.	Usual retail price of 1 suit.	Factory price of 1 suit.		Cost of 1 suit.					Manufacturing profit or loss per suit.	
				Gross.	Net.	Net cost of all materials delivered.	Direct labor.	Indirect labor and factory expense.	Administrative and selling expense.	Total cost.	Profit.	Loss.
23	D	New York	$40.00	$25.50	$23.205	$10.094	$6.308	$1.557	$1.859	$19.818	$3.387	
15	F	Chicago	40.00	25.00	23.250	12.378	3.964	1.899	3.227	21.368	1.882	
42	F	do	35.00	25.00	23.250	11.672	4.893	2.346	2.897	21.808	1.442	
24	C	New York	35.00	22.50	20.475	8.677	6.308	1.425	2.440	18.848	1.627	
24	A	do	35.00	22.50	20.475	8.483	5.709	1.451	1.606	16.483	2.225	
39	F	Chicago	35.00	22.00	20.460	8.645	4.192	1.287	2.359	16.483	3.977	
17	D	Rochester	35.00	21.00	19.110	9.010	4.495	.550	1.521	17.206	1.904	
9	D	do	30.00	20.25	18.405	8.745	6.250	1.390	1.884	18.594		$0.166
39	E	Chicago	30.00	20.00	18.600	8.070	4.292	1.235	2.145	15.694	2.906	
42	E	do	30.00	20.00	18.600	8.022	4.893	1.844	2.318	17.185	1.415	
15	E	do	30.00	20.00	18.600	8.130	3.844	1.599	2.881	17.862	.738	
10	C	New York	30.00	20.00	18.200	8.270	6.150	1.121	2.848	18.389		.189
9	C	Rochester	28.00	18.75	17.062	8.058	6.150	1.268	1.745	17.241		.179
39	D	Chicago	28.00	18.50	17.205	7.354	5.420	1.158	1.863	14.987	2.218	
17	C	Rochester	28.00	18.50	16.152	8.088	5.900	1.490	1.441	16.071	1.499	
9	D	do	28.00	17.75	16.335	7.620	4.233	1.199	1.987	15.039	.061	
39	C	Chicago	27.00	17.50	16.275	6.603	4.639	1.067	1.878	14.787	1.487	
16	B	do	28.00	17.50	16.275	7.615	5.150	1.338	1.819	15.038	1.237	
35	C	Chicago	28.00	17.50	15.995	7.244	5.200	1.129	1.558	15.131	.111	
9	D	do	28.00	16.50	15.345	6.148	4.233	1.041	1.770	13.192	2.153	
39	F	Rochester	25.00	16.50	15.345	6.795	3.242	1.420	1.912	13.359	1.986	
42	A	Chicago	25.00	16.50	15.345	6.126	4.175	.565	2.133	14.999	.346	
37	B	do	24.00	16.50	15.345	8.960	4.263	.599	1.306	15.128	.217	
41	D	Baltimore	25.00	16.50	15.345	7.587	3.808	1.461	2.453	15.309	.036	
24	D	Rochester	25.00	16.50	15.345	6.988	3.498	1.511	2.805	14.802	.543	
11	C	Chicago	25.00	16.50	15.345	6.092	4.855	1.734	2.908	15.587	1.208	
23	E	Milwaukee	25.00	16.50	15.015	6.924	4.855	1.118	1.209	14.105	.915	
35	B	Rochester	25.00	16.50	15.015	6.991	4.810	.816	1.878	14.405	.610	
23	D	New York	25.00	16.50	15.015	7.160	4.810	.836	1.878	14.704	.311	
36	B	Rochester	25.00	16.50	15.015	6.714	4.810	.937	2.350	15.351		.336
10	B	New York	25.00	16.50	15.015	6.714	5.350		2.350			

TABLE 26.—COST OF PRODUCTION, SELLING PRICE, AND PROFIT OR LOSS PER SUIT, OVERCOAT, OR PAIR OF TROUSERS SOLD TO RETAILERS—Con.

THREE-PIECE SUITS—Continued.

Establishment No.	Styles.	Where made.	Usual retail price of 1 suit.	Factory price of 1 suit.		Cost of 1 suit.					Manufacturing profit or loss per suit.	
				Gross.	Net.	Net cost of all materials delivered.	Direct labor.	Indirect labor and factory expense.	Administrative and selling expense.	Total cost.	Profit.	Loss.
34	C	Chicago	$25.00	$16.00	$14.880	$7.006	$3.818	$1.387	$2.379	$14.590	$0.290	
39	A	do	25.00	15.50	14.415	5.751	4.233	1.001	1.662	12.647	1.768	
15	C	do	22.00	15.50	14.415	6.656	3.619	1.201	2.001	13.477	.938	
38	D	Baltimore	24.00	15.50	14.415	7.939	3.336	.866	2.055	14.196	.219	
37	C	do	20.00	15.50	14.415	7.645	4.175	.543	2.004	14.367	.048	
17	B	Rochester	23.50	15.50	14.115	6.138	4.790	.396	1.124	12.448	1.667	
35	D	do	22.50	15.50	14.105	6.255	4.150	.700	1.700	12.805	1.300	
18	A	Cincinnati	25.00	15.00	14.250	6.877	3.680	1.100	3.031	14.488		$0.238
42	C	Chicago	22.50	15.00	13.950	5.610	3.251	1.255	1.738	11.854	2.096	
41	D	Rochester	22.50	15.00	13.950	7.497	3.716	.508	1.187	12.905	1.045	
30	A	Cincinnati	25.00	15.00	13.950	6.889	4.170	.721	1.727	13.507	.443	
47	C	Philadelphia	22.00	15.00	13.500	7.230	3.310	.483	1.477	12.500	1.000	
36	C	Rochester	22.50	14.75	13.422	6.108	4.130	.713	1.679	12.630	.792	
35	C	do	22.50	14.50	13.195	5.905	4.300	.687	1.590	12.482	.713	
36	A	do	22.50	14.50	13.195	6.111	4.130	.714	1.650	12.605	.590	
59	D	Philadelphia	18.00	13.50	12.690	5.398	3.260	.410	1.775	10.843	1.847	
59	C	do	18.00	13.50	12.690	5.561	3.260	.420	1.775	11.016	1.674	
42	B	Chicago	20.00	13.50	12.555	4.878	3.158	1.147	1.567	10.740	1.815	
22	B	New York	20.00	13.50	12.555	6.147	3.885	.546	.723	11.301	1.254	
14	C	Milwaukee	20.00	13.50	12.555	5.649	2.986	.903	2.053	11.591	.964	
15	B	Chicago	20.00	13.50	12.555	5.528	3.388	1.042	1.742	11.700	.855	
38	B	Baltimore	22.00	13.50	12.555	6.261	3.086	.718	1.790	11.855	.700	
41	C	Rochester	20.25	13.50	12.555	6.985	3.463	.473	1.068	11.989	.566	
38	C	Baltimore	22.00	13.50	12.555	6.391	3.086	.727	1.790	11.994	.561	
30	B	Cincinnati	20.00	13.50	12.555	6.190	3.730	.646	1.554	12.120	.435	
11	B	Milwaukee	20.00	13.50	12.555	5.964	2.765	1.377	2.426	12.532	.023	
54	C	New York	18.00	13.50	12.555	6.474	3.953	1.048	1.367	12.842		.287
34	B	Chicago	20.00	13.50	12.555	5.995	3.637	1.235	2.007	12.874		.319
35	B	Rochester	20.00	13.50	12.285	5.300	4.300	.646	1.481	11.727	.558	
23	A	New York	20.00	13.50	12.285	5.778	4.855	1.009	.984	12.626		.341
17	A	Rochester	20.00	13.50	12.280	4.641	4.540	.334	.978	10.493	1.787	
47	B	Philadelphia	18.00	13.50	12.150	6.498	3.110	.440	1.329	11.377	.773	
61	D	New York	16.50	13.00	12.610	7.250	3.055	1.000	1.264	12.569	.041	
18	B	Cincinnati	18.00	12.50	11.875	5.585	3.155	.929	2.526	12.195		.320
25	B	Baltimore	18.00	12.50	11.625	6.410	3.300	.631	.584	10.925	.700	

37	B	do	18.00	12.50	11.625	5.869	3.200	.416	1.616	11.101	.524	
41	B	Rochester	18.75	12.50	11.625	6.326	3.393	.440	.990	11.149	.476	
13	D	Cincinnati	18.00	12.50	11.625	5.650	2.895	.698	2.046	11.289	.336	
44	B	New York	18.00	12.50	11.625	6.030	3.245	.623	1.572	11.470	.155	
35	A	Rochester	18.00	12.50	11.375	4.856	4.000	.596	1.371	10.823	.552	
10	A	New York	18.00	12.50	11.375	5.160	4.830	.776	1.780	12.546		1.171
47	A	Philadelphia	18.00	12.50	11.250	5.801	3.060	.406	1.231	10.498	.752	
56	C	New York	18.00	12.00	11.760	6.859	3.175	.369	1.037	11.440	.320	
14	B	Milwaukee	18.00	12.00	11.160	5.197	3.076	.856	1.814	10.943	.217	
54	A	New York	18.00	12.00	11.160	5.499	3.553	.910	1.215	11.177		.017
54	B	do	18.00	12.00	11.160	5.653	3.553	.925	1.215	11.346		.186
49	C	Philadelphia	16.50	12.00	11.160	5.985	3.000	1.048	1.647	11.680		.520
28	C	New York	18.00	12.00	10.920	5.327	2.850	.491	.819	9.487	1.433	
59	B	Philadelphia	15.00	11.50	10.810	5.116	2.605	.455	1.512	9.688	1.122	
38	A	Baltimore	16.00	11.50	10.695	6.150	2.831	.690	1.526	11.197		.502
5	B	New York	16.50	11.00	11.000	6.710	2.008	.506	.862	10.095	.905	
33	C	do	15.00	11.00	10.780	6.000	2.970	.301	1.098	10.369	.411	
61	C	do	15.50	11.00	10.670	6.050	2.165	.797	1.070	10.082	.588	
42	A	Chicago	15.00	11.00	10.230	4.263	2.796	.700	1.275	9.034	1.196	
64	D	New York	16.50	11.00	10.010	6.253	2.535	.249	.620	9.657	.353	
62	B	do	15.00	10.50	9.765	5.798	2.473	.196	.567	9.034	.731	
37	A	Baltimore	16.00	10.50	9.765	4.193	3.180	.339	1.358	9.070	.695	
25	A	do	15.00	10.50	9.765	5.210	2.970	.532	.490	9.202	.563	
22	A	New York	15.00	10.50	9.765	5.107	3.185	.451	.759	9.502	.263	
15	A	Chicago	16.50	10.50	9.765	4.819	2.608	.752	1.356	9.535	.230	
34	A	do	15.00	10.50	9.765	5.228	2.904	1.043	1.562	10.737		.972
27	A	New York	15.00	10.50	9.555	5.629	3.039	.618	1.424	10.710		1.155
45	D	Philadelphia	16.00	10.00	9.800	5.861	2.070	.270	.760	8.761	1.039	
43	B	New York	15.00	10.00	9.800	5.264	2.268	.269	1.069	8.870	.930	
50	B	do	15.00	10.00	9.800	5.417	2.685	.269	.798	9.169	.631	
55	A	Baltimore	15.00	10.00	9.800	5.170	2.800	.442	.798	9.210	.590	
56	B	New York	15.00	10.00	9.800	5.711	2.760	.311	.865	9.647	.153	
18	C	Cincinnati	15.00	10.00	9.500	4.395	2.335	.715	2.021	9.466	.034	
14	A	Milwaukee	15.00	10.00	9.300	4.166	2.685	.709	1.520	9.080	.220	
44	A	New York	15.00	10.00	9.300	4.659	2.685	.493	1.257	9.094	.206	
41	A	Rochester	15.00	10.00	9.300	5.162	2.850	.363	.791	9.166	.134	
13	C	Cincinnati	15.00	10.00	9.300	4.700	2.420	.581	1.637	9.338		.038
11	A	Milwaukee	15.00	10.00	9.300	4.247	2.302	1.033	1.797	9.379		.079
49	B	Philadelphia	15.00	10.00	9.300	5.061	2.660	.901	1.373	9.995		.695
30	C	Cincinnati	15.00	10.00	9.300	5.205	3.165	.546	1.151	10.067		.767
49	A	Philadelphia	15.00	10.00	9.300	5.282	2.540	.912	1.373	10.107		.807
28	B	New York	15.00	10.00	9.100	4.536	2.850	.444	.682	8.512	.588	
26	B	do	15.00	10.00	9.100	4.462	2.785	.481	1.151	8.879	.221	
64	C	do	16.50	10.00	9.100	5.663	2.535	.232	.564	8.994	.106	
47	D	Philadelphia	15.00	10.00	9.000	4.337	3.060	.339	.985	8.721	.279	
3	A	do	15.00	9.90	9.900	6.298	2.184	.562	1.481	10.525		.625
52	B	New York	15.00	9.50	9.310	5.355	2.749	.577	1.240	9.921		.611
45	C	Philadelphia	15.00	9.00	8.820	5.137	1.820	.243	.684	7.884	.936	
33	B	New York	13.50	9.00	8.820	5.050	2.305	.247	.898	8.500	.320	
61	B	do	13.50	9.00	8.730	4.975	2.135	.690	.874	8.674	.056	
64	B	do	15.00	9.00	8.190	5.159	2.240	.210	.507	8.116	.074	

TABLE 26.—COST OF PRODUCTION, SELLING PRICE, AND PROFIT OR LOSS PER SUIT, OVERCOAT, OR PAIR OF TROUSERS SOLD TO RETAILERS—Con.

THREE-PIECE SUITS—Continued.

Establishment No.	Styles.	Where made.	Usual retail price of 1 suit.	Factory price of 1 suit.		Cost of 1 suit.					Manufacturing profit or loss per suit.	
				Gross.	Net.	Net cost of all materials delivered.	Direct labor.	Indirect labor and factory expense.	Administrative and selling expense.	Total cost.	Profit.	Loss.
18	D	Cincinnati	$12.50	$8.75	$8.312	$3.835	$2.085	$0.630	$1.768	$8.318		$0.006
57	C	New York	13.50	8.50	8.330	5.854	2.529	.540	.862	9.785		1.455
59	A	Philadelphia	12.50	8.50	7.990	3.633	2.140	.341	1.118	7.252	$0.738	
13	B	Cincinnati	13.50	8.50	7.905	3.901	2.070	.488	1.392	7.851	.054	
5	A	New York	12.50	8.00	8.000	4.957	1.803	.382	.626	7.768	.232	
50	C	do	12.00	8.00	7.840	3.951	1.625	.186	.639	6.401	1.439	
45	A	Philadelphia	12.00	8.00	7.840	4.599	1.770	.223	.609	7.201	.639	
45	B	do	12.00	8.00	7.840	4.614	1.770	.224	.609	7.217	.623	
33	A	New York	12.00	8.00	7.840	4.500	2.150	.223	.799	7.672	.168	
55	B	Baltimore	12.50	7.50	7.350	3.686	1.910	.310	.599	6.505	.845	
52	A	New York	12.00	7.50	7.350	3.658	2.299	.424	.979	7.360		.010
57	B	do	12.00	7.50	7.350	4.436	2.084	.420	.761	7.701		.351
57	A	do	12.00	7.50	7.350	4.824	2.084	.445	.761	8.114		.764
13	A	Cincinnati	12.50	7.50	6.975	3.550	1.870	.443	1.227	7.090		.115
46	B	Philadelphia	12.00	7.50	6.975	4.265	1.930	.378	.811	7.384		.409
30	D	Cincinnati	12.50	7.50	6.975	4.133	2.320	.420	.863	7.736		.761
28	A	New York	12.00	7.50	6.825	3.250	2.100	.323	.512	6.185	.640	
26	A	do	10.00	7.50	6.825	3.170	2.030	.345	.863	6.408	.417	
50	A	do	10.00	7.25	7.105	3.652	1.985	.187	.579	6.403	.702	
56	A	do	10.00	7.00	6.860	3.770	2.035	.214	.605	6.624	.236	
61	A	do	10.50	7.00	6.790	3.625	1.535	.500	.680	6.340	.450	
62	A	do	10.00	7.00	6.510	3.989	1.733	.136	.377	6.235	.275	
64	A	do	12.00	7.00	6.370	3.833	1.965	.165	.395	6.358	.012	
3	B	Philadelphia	10.00	6.90	6.900	4.456	1.884	.420	1.033	7.792		.892
43	A	New York	10.00	6.50	6.370	3.275	1.623	.175	.095	5.768	.602	
3	C	Philadelphia	7.50	4.90	4.900	3.166	.954	.273	.733	5.126		.226
3	D	do	6.00	3.90	3.900	2.605	.954	.236	.583	4.378		.478

OVERCOATS.

24	B	New York	$32.50	$21.00	$19.110	$8.681	$5.631	$1.763	$2.434	$18.509	$0.601	
9	F	Rochester	30.00	18.50	16.835	8.453	5.250	1.243	1.722	16.668	.167	
17	F	do	27.00	18.00	16.380	8.420	4.590	.472	1.305	14.787	1.593	
15	I	Chicago	25.00	17.50	16.275	7.949	3.024	1.283	2.259	14.515	1.760	
34	F	do	25.00	16.50	15.345	7.050	3.250	1.320	2.453	14.073	1.272	
23	F	New York	25.00	16.50	15.015	6.376	4.286	1.012	1.203	12.877	2.138	
10	E	do	25.00	16.00	14.560	7.074	5.150	.950	2.279	15.453		$0.893
15	H	Chicago	22.50	15.50	14.415	6.871	2.899	1.142	2.001	12.913	1.502	
37	E	Baltimore	22.00	15.00	13.950	9.076	3.160	562	2.939	15.737		1.787
36	E	Rochester	23.50	15.00	13.650	7.847	3.970	824	1.707	14.348		.698
9	E	do	22.00	14.50	13.195	6.770	4.500	1.022	1.350	13.642		.447
54	E	New York	20.00	14.00	13.020	6.716	3.249	1.002	1.418	12.385	.635	
17	E	Rochester	21.00	14.00	12.740	5.679	3.840	.345	1.015	10.879	1.861	
15	G	Chicago	20.00	13.50	12.555	4.684	2.378	.826	1.742	9.630	2.925	
11	D	Milwaukee	20.00	13.50	12.555	5.926	2.051	1.258	2.426	11.661	.894	
63	C	New York	20.00	13.50	12.555	6.734	2.900	.897	1.449	11.980	.575	
30	E	Cincinnati	20.50	13.50	12.555	7.397	3.130	.686	1.554	12.767		.212
54	D	New York	18.00	13.50	12.555	7.261	3.489	1.080	1.367	13.197		.642
23	E	do	20.00	13.50	12.285	5.176	4.286	.898	.984	11.344	.941	
47	E	Philadelphia	20.00	13.50	12.150	7.224	2.400	.441	1.329	11.394	.756	
47	F	do	20.00	13.50	12.150	7.348	2.400	.447	1.329	11.524	.626	
18	E	Cincinnati	18.00	12.50	11.875	5.689	2.355	.855	2.526	11.425	.450	
59	E	Philadelphia	18.00	12.50	11.750	5.202	2.400	.448	1.644	9.694	2.056	
25	D	Baltimore	18.00	12.50	11.625	6.645	2.650	.604	.584	10.483	1.142	
34	E	Chicago	18.00	12.50	11.625	5.758	2.745	1.090	1.859	11.452	.173	
37	F	Baltimore	18.00	12.50	11.625	6.964	2.910	.453	1.616	11.943		.318
10	D	New York	18.00	12.50	11.375	5.530	3.650	.714	1.780	11.674		.299
5	C	do	16.50	11.00	11.000	6.019	1.348	.427	.862	8.656	2.344	
25	B	Baltimore	15.00	10.50	9.765	5.493	2.250	.504	.490	8.737	1.028	
63	C	New York	15.00	10.50	9.765	5.699	2.420	.756	1.126	10.001		.236
27	B	do	15.00	10.50	9.555	5.859	2.303	.582	1.424	10.168		.613
27	B	do	15.50	10.50	9.555	5.859	2.303	.582	1.424	10.168		.613
55	C	Baltimore	15.00	10.00	9.800	4.513	2.000	.362	.798	7.673	2.127	
18	F	Cincinnati	15.00	10.00	9.500	4.724	2.070	.722	2.021	9.537		.037
13	F	do	15.00	10.00	9.300	4.489	2.795	.595	1.637	9.516		.216
30	F	do	15.00	10.00	9.300	5.531	2.780	.542	1.151	10.004		.704
52	D	New York	15.00	9.50	9.310	4.306	2.515	.486	1.240	8.547	.763	
28	D	do	15.00	9.50	8.645	4.430	2.020	.388	.647	7.485	1.160	
64	F	do	15.00	9.00	8.190	5.052	1.800	.194	.507	7.553	.637	
5	C	do	12.50	8.00	8.000	4.147	1.173	.309	.626	6.255	1.745	
45	E	Philadelphia	12.00	8.00	7.840	4.610	1.370	.209	.608	6.797	1.043	
45	F	do	12.00	7.50	7.350	4.420	1.270	.199	.570	6.459	.891	
55	D	Baltimore	12.50	7.50	7.350	3.646	2.000	.314	.599	6.559	.791	
57	D	New York	12.00	7.50	7.350	4.895	1.628	.420	.761	7.704		.354
52	C	do	12.00	7.50	7.350	4.603	1.695	.448	.979	7.725		.375
13	E	Cincinnati	12.50	7.50	6.975	3.610	1.845	.446	1.227	7.128		.153
64	E	New York	12.00	7.50	6.825	3.412	1.600	.142	.423	5.577	1.248	
63	A	do	10.00	7.26	6.742	3.425	1.820	.488	.778	6.511	.231	

TABLE 26.—COST OF PRODUCTION, SELLING PRICE, AND PROFIT OR LOSS PER SUIT, OVERCOAT, OR PAIR OF TROUSERS SOLD TO RETAILERS—Con.

SEPARATE TROUSERS.

Establishment No.	Styles.	Where made.	Usual retail price of 1 suit.	Factory price of 1 suit.		Cost of 1 suit.					Manufacturing profit or loss per suit.	
				Gross.	Net.	Net cost of all materials delivered.	Direct labor.	Indirect labor and factory expense.	Administrative and selling expense.	Total cost.	Profit.	Loss.
4	E	New York	$3.00	$4.50	$4.500	$2.917	$0.865	$0.226	$0.279	$4.287	$0.213	
53	C	do	6.00	4.00	3.750	1.968	.585	.157	.482	3.192	.558	
4	D	do	6.00	3.75	3.750	2.417	.805	.196	.292	3.710	.040	
4	C	do	5.00	3.50	3.500	2.230	.770	.178	.217	3.395	.105	
2	C	do	5.00	3.50	3.500	1.893	.743	.185	.298	2.899	.296	
4	B	do	4.50	2.63	2.625	1.750	.650	.150	.183	2.733	.107	
2	B	do	4.00	2.75	2.502	1.300	.543	.140	.234	2.217	.285	
53	B	do	3.50	2.50	2.325	1.158	.415	.097	.266	1.936	.389	
51	D	do	3.50	2.50	2.325	1.375	.513	.081	.322	2.291	.034	
46	A	Philadelphia	4.00	2.50	2.325	1.311	.605	.117	.270	2.303	.022	
63	E	New York	3.00	2.25	2.092	1.056	.440	.139	.241	1.876	.216	
2	A	do	3.50	2.25	2.047	1.000	.543	.116	.192	1.851	.196	
4	A	do	3.00	2.00	2.000	1.050	.663	.103	.124	1.940	.040	
51	C	do	3.00	2.00	1.860	.961	.463	.092	.257	1.743	.117	
53	A	do	2.25	1.50	1.395	.744	.275	.063	.178	1.259	.136	
51	A	do	2.00	1.50	1.395	.713	.383	.048	.194	1.338	.057	
51	B	do	2.00	1.50	1.395	.738	.382	.046	.194	1.359	.007	
63	D	do	2.00	1.50	1.395	.818	.350	.109	.161	1.438		$0.043

DESCRIPTION OF UNITS.

Table 27 describes in detail the style and the tailoring in the units for which the elements of cost and profit are shown in Table 26. The first part of the table gives a detailed description of the coats and the second part gives that of the pants and vests. In this table the establishments are arranged in numerical order and the styles of each establishment in alphabetical order.

The table shows the kind of stitching and the parts of the garments sewn by hand or machine. It also shows whether the coats have been made by the "open" or "closed" system, which are the two methods of manufacturing clothing.

TABLE 27.—DETAILED DESCRIPTION OF STYLE AND MAKE OF UNITS, BY ESTABLISHMENTS.

[NOTE.—The styles are designated by letters for convenience of reference to other tables. The same letter applied to the products of different establishments does not indicate identity or even similarity of style.]

Establishment No.	Coats.												
	Styles.	Garment.[a]	Lined.	Method of making.	Outside pockets.			Cuff.	Sleeves.	Kind of stitching.	Canvas sewed by—	Collar padded by—	Buttonholes made by—
					Welted.	Flap.	Patch.						
3	A	Sack coat	Full	Open	3	2		Plain	Basted in	Bluffed edge	Machine	Machine	Machine.
	B	do	do	do	3	2		do	do	do	do	do	Do.
	C	do	do	do	3	2		do	do	do	do	do	Do.
	D	do	do	do	3	2		do	do	do	do	do	Do.
5	A	do	do	Closed	1	2		do	Not basted	Single stitch	do	do	Do.
	B	do	do	Open	1	2		Cuff	Basted in	do	do	Hand	Hand.
	C	Overcoat	do	Closed	1	2		Plain	Not basted	do	do	Machine	Machine.
	D	do	Quarter	Open	1		2	Cuff	Basted in	do	do	Hand	Hand.
9	A	Sack coat	Full	do	1	2		Vent	do	do	Hand	do	Do.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		do	do	do	do	do	Do.
	D	do	do	do	1	2		do	do	do	do	do	Do.
	E	Overcoat	do	do		2		do	do	do	do	do	Do.
	F	do	do	do		2		do	do	do	do	do	Do.
10	A	Sack coat	do	do	1	2		do	do	do	Machine	do	Do.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		do	do	do	do	do	Do.
	D	Spring overcoat	do	do	1	2		Plain	do	do	do	do	Do.
	E	Winter overcoat	do	do	1	2		do	do	Double stitch	do	do	Do.
11	A	Sack coat	do	Closed	1	2		Imitation vent	do	Single stitch	do	Machine	Do.
	B	do	do	Open	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		Vent	do	Plain	do	Hand	Do.
	D	Overcoat	do	do	1	2		Imitation vent	do	Single stitch	do	Machine	Do.
13	A	Sack coat	do	Closed	3	2		Plain	do	Bluffed edge	do	do	Machine.
	B	do	do	do	3	2		do	do	do	do	do	Do.
	C	do	do	do	3	2		do	do	do	do	do	Do.
	D	do	do	do	3	2		do	do	do	do	do	Do.
	E	Overcoat	do	do	2			do	do	do	do	do	Do.
	F	do	do	do	2			do	do	do	do	do	Do.
14	A	Sack coat	do	do	1	2		Imitation vent	Not basted	Single stitch	do	do	Do.
	B	do	do	do	1	2		do	do	do	do	do	Hand.
	C	do	do	Open	1	2		do	do	do	do	do	Do.

15	A	do	do	do	1	2		Plain	do	do	do	do	Machine.
	B	do	do	do	1	2		do	do	do	do	do	Hand.
	C	do	do	do	1	2		do	do	do	do	do	Do.
	D	do	do	do	1	2		do	do	do	do	do	Do.
	E	do	do	do	1	2		do	do	Bluffed edge	do	do	Do.
	F	do	do	do	1	2		do	do	do	do	do	Do.
	G	Overcoat	Quarter	do			2	Cuff	do	Double stitch	do	do	Do.
	H	do	Full	do	1	2		Plain	do	Single stitch	do	do	Do.
	I	do [b]	do	do		2		do	do	Double stitch	do	do	Do.
17	A	Sack coat	do	do			3	Roll cuff	do	Single stitch	Hand	Hand	Hand.
	B	do	do	do			3	do	do	do	do	do	Do.
	C	do	do	do			3	do	do	do	do	do	Do.
	D	do	do	do			3	do	do	do	do	do	Do.
	E	Tourist overcoat	Quarter	do			2	Cuff	do	Double stitch	do	do	Do.
	F	do	do	do			2	do	do	do	do	do	Do.
18	A	Sack coat	Full	do	1	2		Plain	do	Single stitch	Machine	Machine	Do.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	do	do	Closed	1	2		do	do	do	do	do	Machine.
	D	do	do	do	1	2		do	do	do	do	do	Do.
	E	Overcoat	do	Open	3	2		do	do	do	do	do	Do.
	F	do	do	Closed	3	2		do	do	do	do	do	Do.
22	A	Sack coat	do	Open	1	2		do	do	do	do	do	Hand.
	B	do	do	do	1	2		do	do	do	do	do	Do.
23	A	do	do	do	1	2		do	do	do	Hand	Hand	Do.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	Dress	do	do				do	do	Bluffed edge	do	do	Do.
	D	do	do	do				do	do	do	do	do	Do.
	E	Overcoat	do	do	1	2		do	do	Single stitch	do	do	Do.
	F	do	do	do	1	2		do	do	do	do	do	Do.
24	A	Sack coat	Quarter	do	1	2	2	do	Basted in	do	do	do	Do.
	B	Overcoat	Yoke	do			2	Vent	do	do	do	do	Do.
25	A	Sack coat	Full	do	1	2		Plain	do	do	Machine	Machine	Do.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	Overcoat	do	do	1	2		do	do	Bluffed edge	do	do	Do.
	D	do	do	do	1	2		do	do	do	do	do	Do.
26	A	Sack coat	do	Closed	1	2		do	Not basted	Single stitch	do	do	Machine.
	B	do	do	Open	1	2		do	Basted in	do	do	do	Do.
27	A	do	do	Semiopen	1	2		do	do	do	do	do	Hand.
	B	Overcoat	Quarter	do	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		do	do	do	do	do	Do.
28	A	Sack coat	Full	Open	1	2		do	Not basted	do	do	do	Do.
	B	do	do	do	1	2		Cuff	do	do	do	do	Do.
	C	do	do	do	1	2		do	Basted in	do	Hand	do	Do.
	D	Overcoat, Balmacaan.	Quarter				[c] 2	[d]	[d]	[d]	[d]	[d]	[d]
30	A	Sack coat	Full	Open	1	2		Plain	Not basted	Single stitch	Machine	Hand	Do.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		do	do	do	do	do	Do.
	D	do	do	Closed	1	2		do	do	do	do	Machine	Machine.
	E	Overcoat	do	Open	1	2		do	do	do	do	Hand	Hand.
	F	do	do	Semiopen	1	2		do	do	do	do	Machine	Do.

[a] Single breasted unless otherwise noted. [b] Double breasted. [c] Bellows. [d] Data not given.

TABLE 27.—DETAILED DESCRIPTION OF STYLE AND MAKE OF UNITS, BY ESTABLISHMENTS—Continued.

Establishment No.	Coats.													
	Styles.	Garment.[a]	Lined.	Method of making.	Outside pockets.			Cuff.	Sleeves.	Kind of stitching.	Canvas sewed by—	Collar padded by—	Buttonholes made by—
					Welted.	Flap.	Patch.						
33	A	Sack coat	Full	Closed	1	2		Plain	Not basted	Single stitch	Machine	Hand	Machine.
	B	do	do	Open	1	2		Vent	Basted in	do	do	do	Hand.
	C	do	do	do	1	2		Cuff	do	do	do	do	Do.
34	A	do	do	Semiopen	1	2		Vent	Not basted	do	do	Machine	Do.
	B	do	do	Open	1	2		do	do	do	do	do	Do.
	C	do	do	do			3	Cuff	do	do	do	do	Do.
	D	do	do	do	1	2		Vent	do	Bluffed edge	do	do	Do.
	E	Overcoat	do	do	1	2		Plain	do	Single stitch	do	do	Do.
	F	do.[b]	Quarter	do	1	2		Vent	do	Bluffed edge	do	do	Do.
35	A	Sack coat	Full	do	1	2		Plain	Basted in	Single stitch	do	do	Do.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		do	do	do	do	do	Do.
	D	do	do	do	1	2		do	do	do	do	do	Do.
	E	do	do	do	1	2		do	do	do	do	do	Do.
	F	do	do	do	1	2		do	do	do	do	do	Do.
36	A	do	do	do	1	2		do	Not basted	Double stitch	do	do	Do.
	B	do	do	do	1	2		Cuff	do	do	Hand	Hand	Do.
	C	do	do	do	1	2		Plain	do	Single stitch	Machine	Machine	Do.
	D	do	Half	do			3	Cuff	do	do	Hand	Hand	Do.
	E	Overcoat	Skeleton	do	1		2	do	do	Double stitch	Machine	Machine	Do.
37	A	Sack coat	Full	do	1	2		Plain	do	Single stitch	Hand	do	Do.
	B	do	do	do	1	2		do	do	Double stitch	do	do	Do.
	C	do	do	do	1	2		do	do	Single stitch	do	do	Do.
	D	do	do	do	1	2		do	do	Double stitch	do	do	Do.
	E	Overcoat	do	do		2		do	do	Bluffed edge	do	Hand	Do.
	F	do	Skeleton	do		2	c 2	Cuff	do	Double stitch	do	do	Do.
38	A	Sack coat	Full	Closed	1	2		do	Basted in	Single stitch	Machine	Machine	Machine.
	B	do	do	Open	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		do	do	do	do	do	Hand.
	D	do	do	do	1	2		do	do	do	do	do	Do.
39	A	do	do	do			3	Vent	Not basted	do	Hand	Hand	Do.
	B	do	do	do			3	do	do	do	do	do	Do.
	C	do	Half	do	1	2		do	do	do	do	do	Do.
	D	do	Full	do	1	2		do	do	do	do	do	Do.
	E	do	do	do	1	2		do	do	do	do	do	Do.
	F	do	do	do	1	2		do	do	do	do	do	Do.
41	A	do	do	do	1	2		Imitation vent	Basted in	do	Machine	Machine	Do.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		do	do	do	do	do	Do.
	D	do	do	do	1	2		do	do	do	do	do	Do.
	E	do	do	do	1	2		Vent	do	do	do	do	Do.
42	A	do	do	do	1	2		do	Not basted	do	do	do	Do.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		do	do	do	do	do	Do.
	D	do	do	do	1	2		do	do	do	do	do	Do.
	E	do	do	do	1	2		do	do	Bluffed edge	do	Hand	Do.
	F	do	do	do	1	2		do	do	do	do	do	
43	A	do	do	Closed	1	2		Cuff	do	Single stitch	do	Machine	Machine.
	B	do	do	Open	1	2		do	do	do	do	do	Do.
44	A	do	do	do	1	2		do	do	do	do	do	Hand.
	B	do	do	do	1	2		do	do	do	do	do	Do.
45	A	do	do	Closed	1	2		Plain	do	do	do	Hand	Machine.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		do	do	do	do	do	Do.
	D	do	do	do	1	2		do	do	do	do	do	Do.
	E	Overcoat	do	do	1	2		do	do	do	do	do	Do.
	F	do	do	do	1	2		do	do	Bluffed edge	do	do	Do.
46	B	Sack coat	do	Open	2	2		do	do	do	Hand	do	Do.
47	A	do	do	do	4	2		Cuff	Basted in	Single stitch	Machine	do	Do.
	B	do	do	do	4	2		do	do	do	do	do	Do.
	C	do	do	do	4	2		do	do	do	do	do	Do.
	D	do	Quarter	Closed			3	do	do	do	do	Machine	Do.
	E	Overcoat	do	Open			4	do	do	Double stitch	do	Hand	Hand.
	F	do	do	do			4	do	do	do	do	do	Do.
49	A	Sack coat	Full	do	1	2		Vent	do	Single stitch	do	do	Do.
	B	do	do	do			3	Cuff	do	do	do	do	Do.
	C	do	do	do	1	2		Plain	do	do	do	do	Do.
50	A	do	do	do	1	2		do	Not basted	do	do	Machine	Machine.
	B	do	do	do	1	2		do	do	do	Hand	Hand	Hand.
	C	Overcoat	do	do	1	2		Cuff	Basted in	Double stitch	Machine	Machine	Machine.
52	A	Sack coat	do	Closed	1	2		Plain	do	Single stitch	do	Hand and machine	Do.
	B	do	do	Semiopen	1	2		Cuff	do	do	do	do	Hand.
	C	Overcoat	do	Closed	1	2		Plain	Not basted	do	do	Machine	Machine.
	D	do	Skeleton	Semiopen	1		2	Cuff	Basted in	Double stitch	do	Hand and machine	Hand.
54	A	Sack coat	Full	Closed	1	2		Vent	do	Single stitch	do	do	Do.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	do	do	do	1	2		do	do	do	do	do	Do.
	D	Overcoat	do	Open	1	2		do	Not basted	Double stitch	do	do	Do.
	E	do	Quarter	do	1		c 2	Cuff	do	do	do	do	Do.
55	A	Sack coat	Full	do	3	2		Plain	Basted in	Single stitch	do	Machine	Machine.
	B	do	do	Closed	3	2		do	do	do	do	do	Hand.
	C	Overcoat	Quarter	do	3	2		do	do	Double stitch	do	do	Machine.
	D	do	do	do	3	2		do	do	do	do	do	Do.
56	A	Sack coat	Full	do	1	2		do	Not basted	Single stitch	do	do	Hand.
	B	do	do	do	1	2		Cuff	do	do	Hand	Hand	Do
	C	do	do	do	1	2		do	Basted in	do	do	do	

[a] Single breasted unless otherwise noted. [b] Double breasted. [c] Bellows.

TABLE 27.—DETAILED DESCRIPTION OF STYLE AND MAKE OF UNITS, BY ESTABLISHMENTS—Continued.

Establishment No.	Coats.												
	Styles.	Garment.[a]	Lined.	Method of making.	Outside pockets.			Cuff.	Sleeves.	Kind of stitching.	Canvas sewed by—	Collar padded by—	Buttonholes made by—
					Welted.	Flap.	Patch.						
57	A	Sack coat	Full	Closed	1	2		Cuff	Basted in.	Single stitch	Machine	Machine	Machine.
	B	do	do	do	1	2		do	do	do	do	do	Do.
	C	do	do	Open	1	2		do	do	do	do	do	Hand.
	D	Overcoat	Half	Closed	1		2	do	do	do	do	do	Machine.
59	A	Sack coat	Full	do	1	2		Plain	do	Bluffed edge	do	do	Do.
	B	do	do	do			3	do	do	do	Hand	Machine and hand.	Hand.
	C	do	do	Open			3	do	do	do	Machine	do	Do.
	D	do	do	do	1	2		do	do	do	do	do	Do.
	E	Overcoat	do	do		2		do	do	do	do	Machine	Machine.
61	A	Sack coat	do	Closed	1	2		do	do	Single stitch	do	do	Do.
	B	do	do	do	1	2		do	do	do	do	do	Hand.
	C	do	do	Open	1	2		do	do	do	do	Hand	Do.
	D	do	do	do	1	2		do	do	do	do	do	Do.
62	A	do	do	Closed	1	2		do	do	do	do	Machine	Machine.
	B	do	do	Open	1	2		Vent	do	Double stitch	do	do	Do.
63	A	Overcoat	do	Closed	1	2		Plain	do	do	do	do	Do.
	B	do	do	do	1	2		do	do	do	do	Hand	Hand.
	C	do	do	Open	1	2		do	do	do	do	do	Do.
64	A	Sack coat	do	do	1	2		do	do	Single stitch	do	Machine	Machine.
	B	do	do	do	1	2		Vent	do	do	do	do	Do.
	C	do	do	do	1	2		Plain	do	do	do	do	Hand.
	D	do	do	do	1	2		do	do	do	do	do	Do.
	E	Overcoat	do	do	1	2		do	do	Double stitch	do	do	Machine.
	F	do	do	do	1	2		do	do	Single stitch	do	do	Do.

Establishment No.	Styles.	Trousers.[b]									Vests.[c]					
		Pockets.			Waistband.	Tops.	Loops.	Crotch.	Bottoms, plain or cuff.	Bottoms finished by—	Buttonholes made by—	Collar.	Back.	Number of outside pockets.			Buttonholes made by—
		Welted.	Flap.	Patch.										Welted.	Flap.	Patch.	
2	A [d]	3	2		Grown in.	Stitched	Plain	Pieced	Plain	Hand	Machine						
	B [d]	3	2		do	do	do	do	do	do	do						
	C [d]	3	2		Separate	do	do	do	do	do	do						
3	A	3	2		Grown in.	Felled	do	do	do	do	do	None	Lined	4			Machine.
	B	3	2		do	do	do	do	do	do	do	do	do	4			Do.
	C	3	2		do	do	do	do	do	do	do	do	do	4			Do.
	D	3	2		do	do	do	do	do	do	do	do	do	4			Do.
4	A [d]	5			Separate	do	do	do	do	do	do						
	B [d]	5			do	do	do	do	do	do	do						
	C [d]	5			do	do	do	do	do	do	do						
	D [d]	5			do	do	do	do	Cuff	do	do						
	E [d]	5			do	do	do	do	do	do	Hand						
5	A	5			Grown in.	do	do	do	Plain	do	Machine	None	Lined	3			Do.
	B	5			do	do	Tunnel	do	Cuff	Hand	do	do	do	3			Do.
9	A	6			do	do	2 loops; 2 tunnels	Whole	Plain	do	do	do	do	4			Hand.
	B	6			do	do	do	do	do	do	do	do	do	4			Do.
	C	6			do	do	do	do	do	do	do	do	do	4			Do.
	D	6			do	do	do	do	do	do	do	do	do	4			Do.
10	A	5			Separate	do	Plain	do	do	do	Machine	Collar	do	4			Do.
	B	5			do	do	do	do	do	do	do	do	do	4			Do.
	C	5			do	do	do	do	do	do	do	do	do	4			Do.
11	A	5	1		Grown in.	do	Tunnel	do	do	do	do	None	do	4			Machine.
	B	5	1		do	do	do	do	do	do	do	do	do	4			Do.
	C	5	1		do	do	do	do	do	do	do	do	do	4			Hand.
13	A	5			do	Stitched	do	do	Cuff	Machine	do	do	do	4			Machine.
	B	5			do	do	do	do	do	do	do	do	do	4			Do.
	C	5			do	do	do	do	do	do	do	do	do	4			Do.
	D	5			do	do	do	do	do	do	do	do	do	4			Do.
14	A	4	1		do	Felled	Loops and tunnels	do	Plain	Hand	do	do	do	4			Do.
	B	4	1		do	do	do	do	do	do	do	do	do	4			Do.
	C	5	1		do	do	do	do	do	do	do	do	do	4			Do.
15	A	5			do	do	Plain	do	do	do	do	do	do	4			Do.
	B	5			do	do	do	do	do	do	do	do	do	4			Hand.
	C	5			do	do	do	do	do	do	do	do	do	4			Do.
	D	5			do	do	do	do	do	do	do	do	do	4			Do.
	E	5			do	do	do	do	do	do	do	do	do	4			Do.
	F	5			do	do	do	do	do	do	do	do	do	4			Do.

[a] Single breasted unless otherwise noted. [b] Top and fly buttons sewed by hand unless otherwise noted. [c] All single breasted.

TABLE 27.—DETAILED DESCRIPTION OF STYLE AND MAKE OF UNITS, BY ESTABLISHMENTS—Continued.

Establishment No.	Styles.	Trousers.[a]										Vests.[b]					
		Pockets.			Waistband.	Tops.	Loops.	Crotch.	Bottoms, plain or cuff.	Bottoms finished by—	Buttonholes made by—	Collar.	Back.	Number of outside pockets.			Buttonholes made by—
		Welted.	Flap.	Patch.										Welted.	Flap.	Patch.	
17	A	6			Separate	Felled	Tunnel	Whole	Plain	Hand	Hand	None	Lined			4	Hand.
	B	6			do	do	do	do	do	do	do	do	do			4	Do.
	C	6			do	do	do	do	do	do	do	do	do			4	Do.
	D	6			do	do	do	do	do	do	do	do	do			4	Do.
18	A	5			do	do	Plain	Pieced	Cuff	Machine	Machine	do	do	5			Machine
	B	5			do	do	do	do	do	do	do	do	do	5			Do.
	C	5			do	do	do	do	do	do	do	do	do	5			Do.
	D	5			do	do	do	do	do	do	do	do	do	4			Do.
22	A	5			Grown in	Stitched	do	do	Plain	Hand	do	do	do	4			Do.
	B	5			do	Felled	do	do	do	do	do	Collar	do	4			Hand.
23	A	5			do	do	do	Whole	Cuff	do	Hand	do	do	4			Do.
	B	5			do	do	do	do	Plain	do	do	None	do	4			Do.
	C	5			do	do	do	do	do	do	do	Shawl	do	4			Do.
	D	5			do	do	do	do	do	do	do	do	do	4			Do.
24	A	5			Separate	do	do	do	do	do	do	None	Skeleton	4			Do.
25	A	5			Grown in	do	do	do	do	do	Machine	do	Lined	4			Machine.
	B	5			do	do	do	do	do	do	do	do	do	4			Do.
26	A	5			Separate	Stitched	do	Pieced	do	do	do	do	do	4			Do.
	B	2	3		do	Felled	do	do	do	do	do	do	do	4			Do.
27	A	2	3		do	do	Tunnel	Whole	do	do	Hand	do	do	4			Do.
28	A	5			do	Stitched	Plain	Pieced	do	do	Machine	do	do	4			Do.
	B	5			Grown in	do	do	Whole	do	do	do	do	do	4			Do.
	C	5			do	Felled	do	do	do	do	do	do	do	4			Hand.
30	A	5			Separate	do	do	do	Cuff	do	do	Collar	do	4			Do.
	B	5			do	do	do	do	do	do	do	do	do	4			Do.
	C	5			do	do	do	do	do	do	do	None	do	4			Machine.
	D	5			do	do	do	do	do	do	do	do	do	4			Do.
33	A	5			Grown in	Stitched	do	Pieced	Plain	do	do	do	do	4			Do.
	B	5			do	do	do	do	do	do	do	Collar	do	4			Do.
	C	3	2		do	Felled	do	do	do	do	do	None	do	4			Do.
34	A	5			do	do	3 loops; 2 tunnels	Whole	do	do	do	do	do	4			Hand.
	B	4	1		do	do	do	do	do	do	do	Collar	do			4	Do.
	C	3	2		do	do	do	do	do	do	do	None	do	4			Do.
	D	4	1		do	do	do	do	do	do	do						
35	A	5	1		do	do	2 tunnels; 2 plain	do	do	do	Hand	do	do	4			Do.
	B	5	1		do	do	do	do	do	do	do	do	do	4			Do.
	C	5	1		do	do	do	do	do	do	do	do	do	4			Do.
	D	5	1		do	do	do	do	do	do	do	do	do	4			Do.
	E	5	1		do	do	do	do	do	do	do	do	do	4			Do.
	F	5	1		do	do	do	do	do	do	do	do	do	4			Do.
36	A	5			Separate	do	do	Pieced	Cuff	Machine	do	do	do	4			Do.
	B	5			do	do	do	do	do	do	do	do	do	4			Do.
	C	5			do	do	do	do	do	do	do	do	do	4			Do.
	D	5			do	do	do	do	do	do	do	do	Skeleton			4	Do.
37	A	5			Grown in	do	Plain	Whole	Plain	do	Machine	do	Lined	4			Machine.
	B	3	2		do	do	do	do	do	do	do	do	do	2		2	Do.
	C	5			do	do	do	do	do	do	do	do	do	4			Do.
	D	3	2		do	do	do	do	do	do	do	do	Skeleton			4	Hand.
38	A	5			do	do	do	do	do	do	do	do	Lined	4			Machine.
	B	5			do	do	do	do	do	do	do	do	do	4			Do.
	C	5			do	do	do	do	do	do	do	do	do	4			Do.
	D	5			do	do	do	do	do	do	do	do	do	4			Do.
39	A	6			do	do	do	Pieced	Cuff	Hand	do	Collar	do			4	Hand.
	B	6			do	do	do	do	do	do	do	do	do			4	Do.
	C	6			do	do	do	do	do	do	do	do	do	4			Do.
	D	6			do	do	do	do	do	do	Hand	do	do	4			Do.
	E	6			do	do	do	do	do	do	do	do	do	2	2		Do.
	F	6			do	do	do	do	do	do	do	do	do	4			Do.
41	A	5	1		do	Felled	do	do	do	do	do	do	do	4			Do.
	B	5	1		do	do	Tunnel	Whole	Plain	do	Machine	None	do	4			Do.
	C	5	1		do	do	do	do	do	do	do	do	do	4			Do.
	D	5	1		do	do	do	do	do	do	do	do	do	2		2	Do.
	E	5	1		do	do	do	do	do	do	do	do	do	4			Do.
42	A	4			do	do	do	do	do	Machine	do	do	do	4			
	B	5			do	do	do	do	do	Hand	do	do	do	4			
	C	5			do	do	do	do	do	do	do	do	do	4			
	D	5			do	do	do	do	do	do	do	do	do	4			
	E	5			do	do	do	do	do	Hand	do	do	do	4			
	F	5			do	do	do	do	Cuff	do	do	do	do	4			
43	A	5			do	do	Plain	do	Plain	do	Machine	do	do	4			Machine.
	B	5			do	do	do	do	do	do	do	do	do	4			Do.
44	A[c]	5			Separate	do	do	do	do	do	do	do	do	4			Do.
	B[c]	5			do	do	do	do	do	do	do	do	do	4			Do.
45	A	5			Grown in	do	do	do	do	do	do	do	do	4			Do.
	B	5			do	do	do	do	do	do	do	do	do	4			Do.
	C	5			do	do	do	do	do	do	do	do	do	4			Do.
	D	5			do	do	do	do	do	do	do	do	do	4			Do.
46	A[d]		5		Separate	Stitched	Tunnel	do	do	do	do						
	B	4			Grown in	do	Plain	do	do	do	Hand	None	Skeleton	4			Hand.
47	A	2	4		do	Felled	Tunnel	do	do	do	do	Collar	Lined	5			Machine.
	B	2	4		do	do	do	do	do	do	do	do	do	5			Do.
	C	2	4		do	do	do	do	do	do	do	do	do	5			Do.
	D	2	4		do	do	do	do	do	do	do	do	do	5			Do.

[a] Top and fly buttons sewed by hand unless otherwise noted. [b] All single breasted. [c] Fly buttons on trousers sewed by machine. [d] Data for vests not given.

TABLE 27.—DETAILED DESCRIPTION OF STYLE AND MAKE OF UNITS, BY ESTABLISHMENTS—Continued.

Establishment No.	Styles.	Trousers.[a] Pockets. Welted.	Pockets. Flap.	Pockets. Patch.	Waistband.	Tops.	Loops.	Crotch.	Bottoms, plain or cuff.	Bottoms finished by—	Buttonholes made by—	Vests.[b] Collar.	Back.	Number of outside pockets. Welted.	Number of outside pockets. Flap.	Number of outside pockets. Patch.	Buttonholes made by—
49	A	4	1	.....	Separate	Felled	Tunnel	Whole	Cuff	Machine	Machine	None	Lined	4	.....	.....	Machine.
	B	3	3	.....	do	do	do	do	do	do	do	Collar	do	2	.....	2	Do.
	C	3	1	.....	do	do	do	do	Plain	Hand	do	None	do	4	.....	.....	Do.
50	A [c]	5	.....	.....	Grown in	Stitched	Plain	Pieced	do	do	do	do	do	4	.....	.....	Do.
	B [c]	3	2	.....	do	Felled	do	do	do	do	do	do	do	4	.....	.....	Do.
51	A [d]	3	2	.....	do	do	do	do	do	do	do	.....	.....	.....	.....	.....	
	B [d]	3	2	.....	do	do	do	do	do	do	do	.....	.....	.....	.....	.....	
	C [d]	3	2	.....	do	do	do	do	do	do	do	.....	.....	.....	.....	.....	
	D [d]	3	2	.....	do	do	do	do	do	do	do	.....	.....	.....	.....	.....	
52	A	5	.....	.....	do	do	Tunnel	do	do	do	do	None	Lined	4	.....	.....	Do.
	B	5	1	.....	do	do	do	do	Cuff	do	do	Collar	do	4	.....	.....	Do.
53	A [d]	5	.....	.....	Separate	do	Plain	Whole	Plain	do	do	.....	.....	.....	.....	.....	
	B [d]	3	2	.....	do	do	do	do	do	do	do	.....	.....	.....	.....	.....	
	C [d]	2	4	.....	Grown in	do	do	do	do	do	do	.....	.....	.....	.....	.....	
54	A	5	.....	.....	do	do	do	do	do	do	do	Collar	Lined	4	.....	.....	Do.
	B	5	.....	.....	do	do	do	do	do	do	do	do	do	4	.....	.....	Do.
	C	5	.....	.....	do	do	do	do	do	do	do	do	do	4	.....	.....	Do.
55	A	3	1	.....	Separate	do	Tunnel	Pieced	do	Machine	do	do	do	4	.....	.....	Do.
	B	3	1	.....	do	do	do	do	do	do	do	do	do	4	.....	.....	Do.
56	A [c]	5	.....	.....	Grown in	Stitched	Plain	do	do	Hand	do	None	do	4	.....	.....	Do.
	B	5	.....	.....	do	do	do	Whole	do	do	do	do	do	4	.....	.....	Do.
	C	3	2	.....	do	Felled	do	do	do	do	do	Collar	do	4	.....	.....	Do.
57	A	5	.....	.....	do	do	do	Pieced	do	Machine	do	None	do	4	.....	.....	Do.
	B	5	.....	.....	do	do	do	do	do	do	do	do	do	4	.....	.....	Do.
	C	5	.....	.....	do	do	do	Whole	do	do	do	do	do	4	.....	.....	Do.
59	A [c]	5	.....	.....	do	do	do	do	do	do	do	do	do	4	.....	.....	Do.
	B	5	.....	.....	do	do	Tunnel	do	Cuff	do	do	do	do	2	.....	2	Do.
	C	5	.....	.....	do	do	do	do	do	do	do	Collar	do	2	.....	2	Do.
	D	5	.....	.....	do	do	do	do	do	do	do	do	do	2	.....	2	Do.
61	A	5	.....	.....	do	do	Plain	Pieced	Plain	Hand	do	None	do	4	.....	.....	Do.
	B	5	.....	.....	do	do	Tunnel	do	do	do	do	do	do	4	.....	.....	Do.
	C	5	.....	.....	do	do	do	do	do	do	do	do	do	4	.....	.....	Do.
	D	5	.....	.....	do	do	do	do	do	do	do	do	do	4	.....	.....	Do.
62	A	5	.....	.....	Separate	Stitched	Plain	do	do	do	do	do	do	4	.....	.....	Do.
	B	3	2	.....	Grown in	do	do	do	do	do	do	Collar	do	4	.....	.....	Do.
63	D [d]	3	2	.....	Separate	Felled	Tunnel	do	do	Machine	do	.....	.....	.....	.....	.....	
	E [d]	3	2	.....	do	do	do	do	do	do	do	.....	.....	.....	.....	.....	
64	A [c]	5	.....	.....	Grown in	Stitched	Plain	do	do	Hand	do	None	Lined	4	.....	.....	Do.
	B	3	2	.....	do	do	do	do	do	do	do	do	do	4	.....	.....	Do.
	C	5	.....	.....	do	do	Tunnel	do	Cuff	do	do	do	do	4	.....	.....	Do.
	D	5	.....	.....	do	do	do	do	do	do	do	do	do	4	.....	.....	Do.

[a] Top and fly buttons sewed by hand unless otherwise ordered.
[b] All single breasted.
[c] Fly buttons on trousers sewed by machine.
[d] Data for vests not given.
[e] Top buttons on trousers sewed by machine.

UNITS SOLD AT A PROFIT AND AT A LOSS.

Table 28, which follows, shows the number and percentage of units of different garments, for which data are given in Table 26, sold at a profit and the number and percentage sold at a loss:

TABLE 28.—NUMBER OF UNITS REPORTED, AND NUMBER SOLD AT A PROFIT AND AT A LOSS, CLASSIFIED ACCORDING TO KINDS OF GARMENTS.

Kinds.	Units reported.					
	Number of establishments.	Number of styles.	Sold at a profit.		Sold at a loss.	
			Number.	Per cent.	Number.	Per cent.
Three-piece suits:						
Under $8	14	18	9	50.00	9	50.00
$8 to $15	39	83	63	75.90	20	24.10
$15 and over	18	43	37	86.06	6	13.95
Total	43	144	109	75.69	35	24.31
Overcoats:						
Under $8	7	7	4	57.14	3	42.86
$8 to $15	23	31	20	64.52	11	35.48
$15 and over	9	10	7	70.00	3	30.00
Total	26	48	31	64.58	17	35.42
Separate trousers:						
Under $2.75	6	11	10	90.91	1	9.09
$2.75 and over	3	7	7	100.00	.....	.....
Total	6	18	17	94.44	1	5.56
Grand total	48	210	157	74.76	53	25.24

Of the 35 units sold at a loss, in the group for suits, only 3 were made by an establishment that showed a manufacturing and final loss on its year's business; and 6 were made in 2 establishments 1 of which showed a manufacturing profit, 1 a manufacturing loss, and both final losses on their year's business.

Of the 17 overcoats selling at a loss, 1 was made in an establishment showing manufacturing and final losses; 3 were made in 2 establishments with manufacturing profits and final losses, and 3 were made in 2 establishments showing manufacturing losses and final profits.

The number and proportion of the 210 units sold at a profit or at a loss by establishments having a manufacturing profit or loss on their year's business are shown in Table 29.

TABLE 29.—TOTAL NUMBER OF UNITS REPORTED AND PER CENT OF UNITS SOLD AT A PROFIT AND AT A LOSS, ACCORDING TO ESTABLISHMENTS SHOWING A PROFIT OR LOSS ON YEAR'S BUSINESS.

Units reported by—	Number of establishments.	Total number units reported.	Units sold at a profit.		Units sold at a loss.	
			Number.	Per cent.	Number.	Per cent.
Establishments showing a profit on year's business	43	183	142	77.59	41	22.41
Establishments showing a loss on year's business	5	27	15	55.56	12	44.44
All establishments reporting	48	210	157	74.76	53	25.24

The losses on some styles, by establishments shown in the preceding table as having made profits on their year's business, may be explained on several grounds. In the first place, profits on the year's business may be due to increased value of raw materials on hand at the close of the year. Secondly, some establishments knowing accurately what a certain style costs, will sell it on a small margin of profit, or even at a loss, for the purpose of attracting customers to buy more profitable styles. An establishment may find it necessary to carry a complete line of styles in order to meet the demands of its customers and to hold its trade, and may consider it good business policy to sell old or standard styles, at or below cost, to customers who will buy other lines on which a good profit is realized. There are, however, a number of establishments which have such crude systems for computing their "overhead" charges that they do not know exactly how much their profit or loss is on certain styles. Such unsystematic establishments may continue for a long time to sell particular styles of garments at a loss without knowing it. These establishments frequently sell standard styles at prices at which the concerns with accurate cost-accounting systems can not do business profitably. The latter are, therefore, practically forced to sell some of their popular styles below cost, hoping to make up on others.

COST AND PROFIT BY GRADES OF GARMENTS.

Table 30, compiled from Table 26, shows the cost items and the profit on high, medium, and low grades of suits and overcoats, and high and low grades of separate trousers.

TABLE 30.—COMPARATIVE AVERAGE COSTS AND MANUFACTURING PROFITS ON LOW, MEDIUM, AND HIGH PRICED SUITS AND OVERCOATS AND LOW AND HIGH PRICED TROUSERS, BASED ON THE AVERAGE NET PRICE PER UNIT SOLD TO RETAILERS.

[NOTE.—The figures in the box headings show the range of gross prices.]

THREE-PIECE SUITS.

Items.	Under $8, 18 styles.	$8 to $15, 83 styles.	$15 and over, 43 styles.	Under $8, 18 styles.	$8 to $15, 83 styles.	$15 and over, 43 styles.
				Per cent.	*Per cent.*	*Per cent.*
Average net price per unit	$6.65	$10.52	$16.54	100.00	100.00	100.00
Net cost of all materials	3.74	5.41	7.73	56.27	51.37	46.76
Direct labor	1.85	2.93	4.59	27.82	27.87	27.72
Indirect labor and factory expense	.32	.59	1.11	4.86	5.62	6.71
Administrative and selling expense	.73	1.26	2.00	10.90	11.94	12.09
Total cost	6.64	10.19	15.43	99.85	96.80	93.28
Manufacturing profit	.01	.33	1.11	.15	3.20	6.72

OVERCOATS.

Items.	Under $8, 7 styles.	$8 to $15, 31 styles.	$15 and over, 10 styles.	Under $8, 7 styles.	$8 to $15, 31 styles.	$15 and over, 10 styles.
				Per cent.	*Per cent.*	*Per cent.*
Average net price per unit	$7.14	$10.89	$15.55	100.00	100.00	100.00
Net cost of all materials	4.00	5.72	7.78	56.09	52.54	50.02
Direct labor	1.70	2.60	4.12	23.74	23.83	26.50
Indirect labor and factory expense	.35	.64	1.06	4.92	5.84	6.80
Administrative and selling expense	.76	1.30	2.03	10.68	12.01	13.05
Total cost	6.81	10.26	14.99	95.43	94.22	96.37
Manufacturing profit	.33	.63	.56	4.57	5.78	3.63

TABLE 30.—COMPARATIVE AVERAGE COSTS AND MANUFACTURING PROFITS ON LOW, MEDIUM, AND HIGH PRICED SUITS AND OVERCOATS AND LOW AND HIGH PRICED TROUSERS, BASED ON THE AVERAGE NET PRICE PER UNIT SOLD TO RETAILERS—Continued.

SEPARATE TROUSERS.

Items.	Under $2.75, 11 styles.	$2.75 and over, 7 styles.	Under $2.75, 11 styles.	$2.75 and over, 7 styles.
Average net price per unit	$1.87	$3.45	*Per cent.* 100.00	*Per cent.* 100.00
Net cost of all materials	.99	2.07	53.05	59.97
Direct labor	.46	.70	24.57	20.25
Indirect labor and factory expense	.09	.18	4.77	5.10
Administrative and selling expense	.22	.27	11.83	7.96
Total cost	1.76	3.22	94.22	93.28
Manufacturing profit	.11	.23	5.78	6.72

As shown by the table, the percentage of profit on the three-piece suits for which cost data were secured averaged 0.15 per cent on the low-priced suits, 3.20 on the medium-priced suits, and 6.72 on the high priced suits. The proportionate cost for materials decreased from the low to the high priced suits, the proportion for indirect labor and factory expense and for administration and selling expense increased from the low to the high priced suits, while the proportionate cost for direct labor was nearly uniform.

The percentage of profit on the overcoats for which data were secured averaged 4.57 on the low-priced garments, 5.78 on the medium-priced garments, and 3.63 on the high-priced garments. The proportionate cost for materials decreased from the low to the high priced garments, the proportion for indirect labor and factory expense and for administrative and selling expense increased from the low to the high priced garments, while the proportion for direct labor was more in the case of the high-priced garments than in the case either of low or medium priced garments.

Table 31 is similar to Table 30 except that the items of net selling price and of profit are omitted, and the percentage of the items of cost of production is based on the total manufacturing and selling expense.

TABLE 31.—COMPARATIVE AVERAGE COSTS OF LOW, MEDIUM, AND HIGH PRICED SUITS AND OVERCOATS, AND LOW AND HIGH PRICED TROUSERS, BASED ON THE AVERAGE TOTAL COST PER UNIT SOLD TO RETAILERS.

[NOTE.—The figures in the box headings show the range of gross prices.]

THREE-PIECE SUITS.

Items.	Under $8, 18 styles.	$8 to $15, 83 styles.	$15 and over, 43 styles.	Under $8, 18 styles.	$8 to $15, 83 styles.	$15 and over, 43 styles.
Average total cost per unit	$6.64	$10.19	$15.43	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00
Net cost of all materials	3.74	5.41	7.73	56.35	53.07	50.13
Direct labor	1.85	2.93	4.59	27.87	28.80	29.72
Indirect labor and factory expense	.32	.59	1.11	4.86	5.80	7.19
Administrative and selling expense	.73	1.26	2.00	10.92	12.33	12.96

TABLE 31.—COMPARATIVE AVERAGE COSTS OF LOW, MEDIUM, AND HIGH PRICED SUITS AND OVERCOATS, AND LOW AND HIGH PRICED TROUSERS, BASED ON THE AVERAGE TOTAL COST, PER UNIT SOLD TO RETAILERS—Continued.

OVERCOATS.

Items.	Under $8, 7 styles.	$8 to $15, 31 styles.	$15 and over, 10 styles.	Under $8, 7 styles.	$8 to $15, 31 styles.	$15 and over, 10 styles.
Average total cost per unit	$6.81	$10.26	$14.99	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00
Net cost of all materials	4.00	5.72	7.78	58.78	55.77	51.91
Direct labor	1.70	2.60	4.12	24.88	25.29	27.50
Indirect labor and factory expense	.35	.64	1.06	5.15	6.20	7.05
Administrative and selling expense	.76	1.30	2.03	11.19	12.74	13.54

SEPARATE TROUSERS.

Items.	$1.50 to $2.75, 11 styles.	$2.75 to $5, 7 styles.	$1.50 to $2.75, 11 styles.	$2.75 to $5, 7 styles.
Average total cost per unit	$1.76	$3.22	*Per cent.* 100.00	*Per cent.* 100.00
Net cost of all materials	.99	2.07	56.31	64.29
Direct labor	.46	.70	26.08	21.71
Indirect labor and factory expense	.09	.18	5.05	5.46
Administrative and selling expense	.22	.27	12.56	8.54

The variations in this table without an exception agree with the preceding table and clearly show decreases in the percentages of cost of materials from the low to the high grades, and increases in the percentages of cost of direct labor. These facts are shown for the groups of suits and overcoats.

For the group of separate trousers the percentages of material cost increase from the low to the high and the percentages of direct labor cost decrease.

COST OF MATERIALS IN UNITS.

Table 32, which follows, shows in detail the cost of the different materials used in the garments, for which the items of cost and profit are shown in Table 26. In this table the establishments are given in numerical sequence, and the styles of each establishment in alphabetical order. The figures in the column showing the total net cost of all materials used in the unit agree with the figures for the same units in Table 26. Where no amount is entered for freight the materials are delivered free to the manufacturer.

TABLE 32.—DESCRIPTION AND DETAILS OF COST OF CLOTH, BODY LINING, SLEEVE LINING, AND TRIMMINGS USED IN UNITS, BY ESTABLISHMENTS AND STYLES.

[NOTE.—The styles are designated by letters for convenience of reference to other tables. The same letter applied to the product of different establishments does not indicate identity or even similarity of style.]

Establishment No.	Styles.	Gross price.	Total net cost of all materials used in unit.	F., fabric; B. L., body lining; S. L., sleeve lining.	Cloth and linings used in unit.				Cost of all materials used.				
					Description.	Width in inches.	Yards.	Price per yard.	Cloth and linings.			Trimmings and sundries.	Freight.
									Gross cost.	Discount.	Net cost.		
2	A	$2.25	$1.000	F	Cotton mixture	54	1¼	$0.600	$0.750	(a)	$0.750	$0.250	.....
	B	2.75	1.300	F	....do	54	1¼	.800	1.000	(a)	1.000	.300	.....
	C	3.50	1.863	F	Worsted	54	1¼	1.250	1.563	(a)	1.563	.300	.....
				F	....do	56	3⅛	1.250	4.219	(a)			
3	A	9.90	6.298	B. L.	Mohair serge	32	1¼	.300	.563	(a)	5.036	1.262	.....
				S. L.	Sateen	40	1¼	.145	.254	(a)			
				F	Worsted	56	3⅛	.900	3.033	(a)			
	B	6.90	4.456	B. L.	Mohair serge	32	1¼	.250	.469	(a)	3.712	.744	.....
				S. L.	Sateen	40	1¼	.120	.210	(a)			
				F	Worsted	56	3⅛	.600	2.025	(a)			
	C	4.90	3.166	B. L.	Mercerized Italian	32	1¼	.150	.253	(a)	2.416	.750	.....
				S. L.	Twill	40	1¼	.083	.138	(a)			
				F	Worsted	56	3⅛	.450	1.519	(a)			
	D	3.90	2.605	B. L.	Mercerized Italian	32	1¼	.130	.228	(a)	1.855	.750	.....
				S. L.	Cambric	40	1¼	.065	.108	(a)			
4	A	2.00	1.050	F	Worsted	58	1¼	.720	.900	(a)	.900	.150	.....
	B	2.95	1.800	F	Cashmere	56	1½	1.200	1.600	(a)	1.600	.200	.....
	C	3.50	2.230	F	Worsted	56	1½	1.500	2.000	(a)	2.000	.230	.....
	D	3.75	2.417	F	Unfinished worsted	56	1½	1.625	2.167	(a)	2.167	.230	.....
	E	4.50	2.917	F	Worsted	56	1½	2.000	2.667	(a)	2.667	.250	.....
				F	Serge	54	3½	1.250	4.063	$0.406			
5	A	8.00	4.957	B. L.	....do	32	1½	.240	.360	.036	4.060	.897	.....
				S. L.	Cotton	40	⅝	.110	.083	.004			
				F	French back, silk mixture	54	3½	1.750	5.688	.589			
	B	11.00	6.719	B. L.	Serge	32	1½	.350	.525	.053	5.687	1.032	.....
				S. L.	Cotton	40	⅝	.135	.101	.005			
				F	Cashmere	54	2½	1.150	3.163	.316			
	C	8.00	4.147	B. L.	Serge	32	2½	.240	.540	.054	3.567	.580	.....
				S. L.	Venetian	32	1	.260	.260	.026			
				F	Cashmere	54	2½	1.750	4.813	.481			
	D	11.00	6.019	B. L.	Satin	36	½	1.000	.500	.050	5.349	.670	.....
				S. L.	Satin dechine	22	1½	.420	.630	.063			
				F	Fancy worsted	56	3½	1.350	5.062	.506			
9	A	16.75	7.244	B. L.	Alpaca	32	2½	.400	.900	.072	5.494	1.750	.....
				S. L.	Sateen	40	⅝	.150	.113	.003			
	B	17.75	7.620	F	Fancy worsted	56	3½	1.425	5.344	.534	5.873	1.750	.....
				B. L.	Alpaca	32	2½	.450	1.013	.081			
				S. L.	Sateen	40	⅝	.180	.135	.004			
	C	18.75	8.058	F	Fancy worsted	56	3½	1.550	5.812	.581	6.308	1.750	.....
				B. L.	Alpaca	32	2½	.450	1.013	.081			
				S. L.	Sateen	40	⅝	.200	.150	.005			
	D	20.25	9.070	F	Fancy worsted	56	3½	1.850	6.937	.694	7.320	1.750	.....
				B. L.	Alpaca	32	2½	.450	1.013	.081			
				S. L.	Sateen	40	⅝	.200	.150	.005			
				F	Cheviot	54	2¾	1.225	3.369	.337			
	E	14.50	6.770	B. L.	Serge	32	2½	.375	1.031	.083	4.670	2.100	.....
				S. L.	Satin silk	22	1½	.500	.750	.060			
				F	Cheviot	54	2½	1.800	4.950	.495			
	F	18.50	8.453	B. L.	Serge	32	2½	.450	1.238	.099	6.353	2.100	.....
				S. L.	Satin silk	22	1½	.550	.825	.066			
				F	Cashmere	54	3½	.850	2.975	.298			
10	A	12.50	5.160	B. L.	Mohair	32	2½	.325	.772	.022	3.530	1.630	.....
				S. L.	Sateen	40	⅝	.140	.105	.002			
				F	Fancy worsted	54	3½	1.250	4.375	.438			
	B	16.50	6.714	B. L.	Mohair	32	2½	.425	1.008	.030	5.044	1.670	.....
				S. L.	Sateen	40	⅝	.175	.131	.003			
				F	Fancy worsted	54	3½	1.650	5.775	.578			
	C	20.00	8.270	B. L.	Mohair	32	2½	.500	1.188	.036	6.500	1.770	.....
				S. L.	Sateen	40	⅝	.205	.154	.003			
				F	Diagonal twilled cashmere	54	2⅜	1.050	2.756	.276			
	D	12.50	5.530	B. L.	Serge	32	2½	.375	.984	.030	4.280	1.250	.....
				S. L.	Satin	22	1½	.575	.863	.017			
				F	Kersey	54	2⅜	1.250	3.281	.328			
	E	16.00	7.074	B. L.	Serge	32	2½	.425	1.222	.037	5.174	1.900	.....
				S. L.	Satin	22	1⅝	.650	1.056	.020			
				F	Cashmere	55	3½	.760	2.660	.266			
11	A	10.00	4.247	B. L.	Alpaca	32	1½	.250	.375	.030	2.838	1.362	$0.047
				S. L.	Sateen	40	⅝	.135	.101	.002			
				F	Worsted	55	3½	1.190	4.165	.417			
	B	13.50	5.964	B. L.	Alpaca	32	1½	.350	.525	.040	4.355	1.543	.066
				S. L.	Cambric	40	⅝	.165	.124	.002			
				F	Serge	55	3½	1.470	5.145	.515			
	C	16.50	6.988	B. L.	Alpaca	32	1½	.400	.600	.048	5.319	1.592	.077
				S. L.	Sateen	40	⅝	.185	.139	.002			
				F	Vicuna	55	2½	1.140	2.850	(a)			
	D	13.50	5.926	B. L.	Mohair serge	32	2½	.350	.875	.070	4.311	1.550	.065
				S. L.	Satin, cotton back	22	1½	.475	.713	.057			
				F	Worsted	56	3½	.700	2.333	.233			
13	A	7.50	3.550	B. L.	Serge	30	2	.275	.550	.055	2.689	.861	.....
				S. L.	Cambric	40	1¼	.084	.105	.011			
				F	Worsted	56	3½	.800	2.668	.267			
	B	8.50	3.901	B. L.	Serge	30	2	.275	.550	.055	2.990	.911	.....
				S. L.	Cambric	40	1¼	.084	.105	.011			
				F	Cashmere	56	3½	1.000	3.333	.333			
	C	10.00	4.700	B. L.	Serge	30	2	.300	.600	.060	3.664	1.036	.....
				S. L.	Cambric	40	1¼	.110	.138	.014			

a Materials purchased net. No discount.

TABLE 32.—DESCRIPTION AND DETAILS OF COST OF CLOTH, BODY LINING, SLEEVE LINING, AND TRIMMINGS USED IN UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Gross price.	Total net cost of all materials used in unit.	F., fabric; B. L., body lining; S. L., sleeve lining.	Cloth and linings used in unit.				Cost of all materials used.				
					Description.	Width in inches.	Yards.	Price per yard.	Cloth and linings.			Trimmings and sundries.	Freight.
									Gross cost.	Discount.	Net cost.		
13	D	$12.50	$5.650	F.	Worsted	56	3½	$1.250	$4.167	$0.417			
				B. L.	Serge	30	2	.350	.700	.070	$4.543	$1.107	
				S. L.	Cambric	40	1¼	.145	.181	.018			
	E	7.50	3.610	F.	Cashmere	56	2¼	.650	1.787	.179			
				B. L.	Venetian	32	3¼	.275	1.031	.103	2.536	1.074	
				S. L.[a]									
	F	10.00	4.489	F.	Cashmere	56	2¾	.900	2.475	.248			
				B. L.	Venetian	32	3¼	.275	1.031	.103	3.155	1.334	
				S. L.[a]									
14	A	10.00	4.166	F.	Cashmere	54	3⅜	.855	2.885	.200			
				B. L.	Alpaca	32	1½	.250	.375	.030	3.119	.995	$0.052
				S. L.	Sateen	40	¼	.120	.090	.001			
	B	12.00	5.197	F.	Worsted	54	3⅜	1.135	3.830	.270			
				B. L.	Serge	32	1½	.285	.430	.034	4.059	1.060	.078
				S. L.	Sateen	40	¼	.140	.105	.002			
	C	13.50	5.649	F.	Worsted	54	3⅜	1.230	4.151	.291			
				B. L.	Serge	32	1½	.315	.473	.038	4.413	1.158	.078
				S. L.	Sateen	40	¼	.160	.120	.002			
15	A	10.50	4.819	F.	Hard worsted	55	3½	1.000	3.500	.350			
				B. L.	Alpaca	32	2¼	.300	.638	.057	3.812	.960	.047
				S. L.	Sateen	40	¼	.110	.083	.002			
	B	13.50	5.528	F.	Hard worsted	55	3½	1.175	4.113	.411			
				B. L.	Alpaca	32	2¼	.325	.691	.062	4.427	1.050	.051
				S. L.	Sateen	40	¼	.130	.098	.002			
	C	15.50	6.656	F.	Hard worsted	55	3½	1.325	4.637	(b)			
				B. L.	Alpaca	32	2¼	.350	.744	.067	5.438	1.160	.058
				S. L.	Sateen	40	¼	.155	.116	.002			
	D	17.50	7.822	F.	Hard worsted	55	3½	1.625	5.687	(b)			
				B. L.	Alpaca	32	2¼	.365	.776	.070	6.522	1.220	.080
				S. L.	Sateen	40	¼	.175	.131	.002			
	E	20.00	9.838	F.	Hard worsted	55	3½	2.325	8.137	.651			
				B. L.	Alpaca	32	2¼	.425	.903	.081	8.448	1.293	.097
				S. L.	Sateen	40	¼	.190	.143	.003			
	F	25.00	12.378	F.	Hard worsted	55	3½	3.050	10.675	.854			
				B. L.	Alpaca	32	2¼	.450	.956	.086	10.911	1.350	.117
				S. L.	Sateen	40	¼	.300	.225	.005			

	G	13.50	4.684	F.	Cheviot	55	3	1.125	3.375	.338			
				B. L.	Serge, silk	30	1¼	.700	1.225	.025	4.237	.390	.057
				S. L.[a]	....do	30							
	H	15.50	6.871	F.	Melton	55	2¾	1.525	4.194	.419			
				B. L.	Mohair	32	2¼	.350	.963	.019	5.416	1.360	.095
				S. L.	Satin	22	1½	.500	.750	.053			
	I	17.50	7.949	F.	Vicuna	55	3½	1.400	4.900	(b)			
				B. L.	Mohair	32	3	.375	1.125	.023	6.699	1.160	.090
				L. S.	Satin	22	1½	.500	.750	.053			
17	A	13.50	4.641	F.	Cashmere	56	3¼	.750	2.625	.184			
				B. L.	Alpaca	54	2½	.375	1.078	.108	3.585	1.056	
				S. L.	Cotton	32	½	.220	.193	.019			
	B	15.50	6.138	F.	Worsted	56	3½	1.210	4.235	.297			
				B. L.	Alpaca	54	2½	.420	1.208	.121	5.229	.909	
				S. L.	Cotton	32	½	.260	.227	.023			
	C	18.50	8.088	F.	Unfinished worsted	56	3½	1.640	5.740	.402			
				B. L.	Alpaca	54	2½	.450	1.294	.129	6.834	1.254	
				S. L.	Cotton	32	½	.420	.367	.036			
	D	21.00	9.715	F.	Worsted	56	3½	2.040	7.140	.500			
				B. L.	Alpaca	54	2½	.470	1.351	.135	8.131	1.584	
				S. L.	Cotton	32	½	.350	.306	.031			
	E	14.00	5.679	F.	Cashmere	54	3	1.050	3.150	.221			
				B. L.	Satin	54	2½	.900	2.025	.203	5.145	.534	
				S. L.	....do	34	½	.500	.438	.044			
	F	18.00	8.420	F.	Worsted	56	3	1.620	4.860	.340			
				B. L.	Silk	54	2½	1.125	2.531	.253	7.684	.736	
				S. L.	....do	34	½	1.125	.984	.098			
18	A	15.00	6.677	F.	Worsted	56	3½	1.500	5.250	.525			
				B. L.	Serge	32	2	.380	.760	.076	5.537	1.140	
				S. L.	Cotton	40	½	.175	.131	.003			
	B	12.50	5.585	F.	Worsted	56	3½	1.230	4.305	.427			
				B. L.	Serge	32	2	.340	.680	.068	4.582	1.003	
				S. L.	Cotton	40	½	.125	.094	.002			
	C	10.00	4.395	F.	Cashmere	56	3¼	.925	3.237	.322			
				B. L.	Serge	32	2	.285	.570	.057	3.492	.903	
				S. L.	Cotton	40	½	.100	.075	.001			
	D	8.75	3.835	F.	Cashmere	56	3½	.800	2.800	.280			
				B. L.	Serge	32	2	.260	.520	.052	3.055	.780	
				S. L.	Cotton	40	½	.090	.068	.001			
	E	12.50	5.689	F.	Cashmere	56	3	1.200	3.600	.360			
				B. L.	Serge	32	3	.375	1.125	.113	4.589	1.100	
				S. L.	Silk, cotton back	22	1½	.250	.375	.038			
	F	10.00	4.724	F.	Cashmere	56	3	1.000	3.000	.300			
				B. L.	Serge	32	3	.325	.975	.098	3.874	.850	
				S. L.	Silk, cotton back	22	1½	.220	.330	.033			
22	A	10.50	5.107	F.	Cashmere	56	3½	1.150	4.025	.403			
				B. L.	Alpaca	32	2½	.280	.630	.063	4.189	.918	
				S. L.[c]									
	B	13.50	6.147	F.	Fancy worsted	56	3½	1.420	4.970	.497			
				B. L.	Alpaca	32	2¼	.340	.765	.076	5.162	.985	
				S. L.[c]									

[a] Sleeve lining included in body lining. [b] Materials purchased net. No discount. [c] Sleeve lining included in cost of trimmings.

TABLE 32.—DESCRIPTION AND DETAILS OF COST OF CLOTH, BODY LINING, SLEEVE LINING, AND TRIMMINGS USED IN UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Gross price.	Total net cost of all materials used in unit.	F., fabric; B. L., body lining; S. L., sleeve lining.	Cloth and linings used in unit.				Cost of all materials used.				
					Description.	Width in inches.	Yards.	Price per yard.	Cloth and linings.			Trimmings and sundries.	Freight.
									Gross cost.	Discount.	Net cost.		
23	A	$13.50	$5.778	F.	Cashmere	56	3¼	$1.045	$3.658	(a)			
				B. L.	Alpaca	36	1¼	.325	.569	$0.057	$4.276	$1.502	
				S. L.	Sateen	36	⅛	.145	.109	.003			
	B	16.50	6.924	F.	Worsted	56	3¼	1.340	4.690	(a)			
				B. L.	Alpaca	36	1¼	.375	.656	.066	5.400	1.524	
				S. L.	Sateen	36	⅛	.165	.124	.001			
	C	22.50	8.677	F.	Unfinished worsted	56	3¼	1.228	3.991	(a)			
				B. L.	Silk	30	1⅛	1.050	1.969	.197	5.905	2.772	
				S. L.	Satin	40	⅛	.200	.150	.008			
	D	25.50	10.094	F.	Unfinished worsted	56	3¼	1.370	4.453	(a)			
				B. L.	Silk	30	1⅛	1.200	2.250	.225	7.322	2.772	
				S. L.	do	40	⅛	1.250	.938	.094			
	E	13.50	5.176	F.	Shetland	56	2½	.940	2.350	(a)			
				B. L.	Venetian	54	1⅛	700	1.138	.114	4.056	1.120	
				S. L.	Satin	22	1½	.500	.750	.068			
	F	16.50	6.376	F.	Melton	56	2½	1.365	3.413	(a)			
				B. L.	Venetian	54	1⅛	.700	1.138	.114	5.256	1.120	
				S. L.	Satin	22	1½	.600	.900	.081			
24	A	22.50	8.482	F.	Cheviot	58	3⅜	1.750	6.344	.571			
				B. L.	Silk	30	⅞	1.100	.825	.074	7.343	1.139	
				S. L.	do	30	⅞	1.200	.900	.081			
	B	21.00	8.681	F.	Cheviot	56	3½	1.800	5.625	.506			
				B. L.	Silk	30	2½	1.300	2.925	.263	7.781	.900	
				S. L.[b]	do	30							
25	A	10.50	5.210	F.	Cashmere	55	3½	1.100	3.575	.250			
				B. L.	Alpaca	30	1⅜	.350	.481	.057	3.852	1.358	
				S. L.	Sateen	34	⅛	.140	.105	.002			
	B	12.50	6.410	F.	Cashmere	54	3⅜	1.450	4.712	.330			
				B. L.	Alpaca	30	1⅛	.400	.650	.065	5.085	1.325	
				S. L.	Sateen	54	⅛	.160	.120	.002			
	C	10.50	5.493	F.	Melton	54	2½	1.250	3.437	.227			
				B. L.	Serge	30	2⅛	.350	.919	.092	4.698	.795	
				S. L.	Satin	27	1¼	.450	.675	.014			
	D	12.50	6.645	F.	Kersey	54	2⅜	1.600	4.400	.308			
				B. L.	Serge	30	2⅛	.400	1.050	.105	5.845	.800	
				S. L.	Satin	27	1¼	.550	.825	.017			
26	A	7.50	3.170	F.	Cashmere	56	3¼	.700	2.275	.228			
				B. L.	Serge	32	2	.250	.500	.025	2.595	.575	
				S. L.	Sateen	40	⅛	.100	.075	.002			
	B	10.00	4.462	F.	Serge	54	3⅓	1.000	3.333	.333			
				B. L.	Alpaca	32	2	.320	.640	.034	3.712	.750	
				S. L.	Sateen	40	⅛	.145	.108	.002			
27	A	10.50	5.629	F.	Worsted	54	3⅜	1.375	4.641	.464			
				B. L.	Mohair	32	2	.350	.700	.070	4.911	.718	
				S. L.	Sateen	40	⅛	.165	.110	.006			
	B	10.50	5.859	F.	Melton	56	2⅝	1.500	4.125	.413			
				B. L.	Satin	41	1½	1.000	1.500	.150	5.062	.797	
				S. L.[b]	do	41							
	C	10.50	5.859	F.	Shetland	56	2⅝	1.500	4.125	.413			
				B. L.	Satin	41	1½	1.000	1.500	.150	5.062	.797	
				S. L.[b]	do	41							
28	A	7.50	3.250	F.	Serge	54	3⅜	.670	2.261	.181			
				B. L.	Alpaca	27	2½	.250	.563	.017	2.710	.540	
				S. L.	Sateen	40	⅛	.115	.086	.002			
	B	10.00	4.536	F.	Fancy worsted	54	3⅜	1.000	3.375	.270			
				B. L.	Alpaca	27	2½	.320	.720	.022	3.906	.630	
				S. L.	Sateen	40	⅛	.140	.105	.002			
	C	12.00	5.327	F.	Fancy worsted	54	3⅜	1.250	4.219	.338			
				B. L.	Alpaca	27	2½	.320	.720	.022	4.697	.630	
				S. L.	Sateen	40	⅛	.160	.120	.002			
	D	9.50	4.430	F.	Fancy overcoating	54	3	1.070	3.210	.257			
				B. L.	Satin	27	2½	.500	.750	.023	3.680	.750	
				S. L.[b]									
30	A	15.00	6.889	F.	Worsted	56	3½	1.500	5.000	.350			
				B. L.	Serge	31	2½	.475	1.069	.075	5.799	1.090	
				S. L.	Sateen	40	⅛	.210	.158	.003			
	B	13.50	6.190	F.	Cashmere	56	3½	1.350	4.500	.310			
				B. L.	Serge	31	2½	.400	.900	.060	5.170	1.020	
				S. L.	Sateen	40	⅛	.190	.143	.003			
	C	10.00	5.205	F.	Worsted	56	3½	1.125	3.750	.260			
				B. L.	Serge	30	2⅜	.380	.855	.060	4.409	.796	
				S. L.	Sateen	40	⅛	.170	.127	.003			
	D	7.50	4.133	F.	Serge	56	3⅓	.900	3.000	.210			
				B. L.	do	30	2⅜	.325	.731	.051	3.573	.560	
				S. L.	Sateen	40	⅛	.140	.105	.002			
	E	13.50	7.397	F.	Cashmere	54	3	1.400	4.200	.294			
				B. L.	Serge	30	2⅜	.460	1.265	.089	6.337	1.060	
				S. L.	Satin, silk	22	1½	.900	1.350	.095			
	F	10.00	5.531	F.	Cashmere	54	3	1.000	3.000	.210			
				B. L.	Serge	30	2⅜	.400	1.100	.077	4.650	.881	
				S. L.	Satin, silk	22	1½	.600	.900	.063			
33	A	8.00	4.500	F.	Serge	56	3½	1.100	3.667	.367			
				B. L.	do	32	2⅜	.320	.680	.068	3.912	.588	
				S. L.[c]	do	32							
	B	9.00	5.050	F.	Fancy worsted	56	3½	1.250	4.167	.417			
				B. L.	Alpaca	32	2⅜	.370	.786	.079	4.457	.593	
				S. L.	do	32							

[a] Materials purchased net. No discount.

[b] Sleeve lining included in body lining.

[c] Sleeve lining included in cost of trimming.

TABLE 32.—DESCRIPTION AND DETAILS OF COST OF CLOTH, BODY LINING, SLEEVE LINING, AND TRIMMINGS USED IN UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Gross price.	Total net cost of all materials used in unit.	F., fabric; B. L., body lining; S. L., sleeve lining.	Cloth and linings used in unit.				Cost of all materials used.				
					Description.	Width in inches.	Yards.	Price per yard.	Cloth and linings.			Trimmings and sundries.	Freight.
									Gross cost.	Discount.	Net cost.		
33	C	$11.00	$6.000	F.	Fancy worsted	56	3¼	$1.500	$5.000	$0.500			
				B. L.	Alpaca	32	2⅛	.400	.850	.085	$5.265	$0.735	
				S. L.[a]	do	32							
34	A	10.50	5.228	F.	Worsted	56	3½	1.050	3.675	.368			
				B. L.	Serge	32	2½	.300	.638	.064	3.984	1.200	$0.044
				S. L.	Sateen	40	⅞	.140	.105	.002			
	B	13.50	5.995	F.	Worsted	56	3½	1.250	4.375	.438			
				B. L.	Serge	32	2½	.320	.680	.068	4.675	1.270	.050
				S. L.	Sateen	40	⅞	.170	.128	.002			
	C	16.00	7.006	F.	Cheviot	56	3½	1.450	5.075	.508			
				B. L.	Alpaca	32	2	.380	.760	.076	5.398	1.550	.058
				S. L.	Sateen	40	¼	.200	.150	.003			
	D	16.50	7.587	F.	Unfinished worsted	56	3½	1.650	5.775	.578			
				B. L.	Serge	32	2⅛	.400	.850	.085	6.124	1.400	.063
				S. L.	Sateen	40	⅞	.220	.165	.003			
	E	12.50	5.758	F.	Fancy overcoating	54	2½	1.050	2.888	.289			
				B. L.	Serge	32	2½	.340	.935	.019	4.240	1.470	.048
				S. L.	Satin	24	1½	.500	.750	.015			
	F	16.50	7.050	F.	Chinchilla	56	3	1.300	3.900	.390			
				B. L.	Sateen	32	1⅞	1.050	1.968	.039	5.439	1.550	.061
				S. L.[b]	do	32							
35	A	12.50	4.856	F.	Woolen	54	3½	.800	3.000	.300			
				B. L.	Alpaca	30	2	.300	.600	.042	3.356	1.500	
				S. L.	Sateen	40	⅞	.140	.105	.007			
	B	13.50	5.300	F.	Woolen	54	3½	.900	3.375	.338			
				B. L.	Alpaca	30	2	.350	.700	.049	3.800	1.500	
				S. L.	Sateen	40	⅞	.160	.120	.008			
	C	14.50	5.905	F.	Woolen	54	3½	1.075	4.031	.403			
				B. L.	Alpaca	30	2	.350	.700	.049	4.405	1.500	
				S. L.	Sateen	40	⅞	.180	.135	.009			
	D	15.50	6.255	F.	Worsted	54	3½	1.175	4.406	.441			
				B. L.	Alpaca	30	2	.350	.700	.049	4.755	1.500	
				S. L.	Sateen	40	⅞	.200	.150	.011			
	E	16.50	6.092	F.	Worsted	54	3½	1.125	4.225	.423			
				B. L.	Alpaca	30	2	.350	.700	.049	4.592	1.500	
				S. L.	Sateen	40	¼	.200	.150	.011			

	F	17.50	7.015	F.	Worsted	54	3½	1.400	5.250	.525			
				B. L.	Alpaca	34	2	.350	.700	.049	5.515	1.500	
				S. L.	Sateen	40	⅞	.200	.150	.011			
36	A	14.50	6.111	F.	Worsted	56	3½	1.125	4.125	(c)			
				B. L.	Serge	32	1½	.270	.473	(c)	4.696	1.415	
				S. L.	Sateen	40	¾	.130	.098	(c)			
	B	16.50	7.180	F.	Worsted	56	3½	1.350	4.950	(c)			
				B. L.	Serge	32	1½	.315	.550	(c)	5.620	1.560	
				S. L.	Sateen	40	¼	.160	.120	(c)			
	C	14.75	6.108	F.	Worsted	54	3½	1.125	4.125	(c)			
				B. L.	Alpaca	30	1½	.270	.473	(c)	4.696	1.412	
				S. L.	Sateen	40	¾	.130	.098	(c)			
	D	16.50	6.901	F.	Worsted	56	3	1.300⅜	4.767	(c)			
				B. L.	Alpaca	32	1½	.315	.394	(c)	5.281	1.620	
				S. L.	Sateen	40	¼	.160	.120	(c)			
	E	15.00	7.847	F.	Wool	54	2½	1.000	2.667	(c)			
				B. L.	Satin	30	1½	1.080	1.350	(c)	5.637	2.210	
				S. L.	Silk	30	1½	1.080	1.620	(c)			
37	A	10.50	4.193	F.	Cashmere	54	3½	.600	2.175	.166			
				B. L.	Alpaca	32	2½	.275	.619	.012	2.813	1.380	
				S. L.	Sateen	40	1½	.115	.201	.004			
	B	12.50	5.869	F.	Cashmere	54	3½	1.025	3.716	.297			
				B. L.	Alpaca	32	2½	.325	.731	.015	4.375	1.494	
				S. L.	Sateen	40	1½	.140	.245	.005			
	C	15.50	7.645	F.	Worsted	54	3½	1.400	5.075	.406			
				B. L.	Alpaca	32	2½	.400	.900	.018	5.843	1.802	
				S. L.	Sateen	40	1½	.170	.298	.006			
	D	16.50	8.126	F.	Cheviot	54	3½	1.500	5.438	.435			
				B. L.	Alpaca	32	2½	.450	1.013	.020	6.339	1.787	
				S. L.	Sateen	40	1½	.200	.350	.007			
	E	15.00	9.076	F.	Kersey	54	2½	1.150	3.163	.253			
				B. L.	Silk	32	2½	1.275	3.188	.064	7.020	2.056	
				S. L.	Satin	22	1½	.575	1.006	.020			
	F	12.50	6.964	F.	Cheviot	54	2½	1.000	2.750	.220			
				B. L.	Satin	32	1½	.950	1.663	.033	5.790	1.174	
				S. L.	do	22	1½	.950	1.663	.033			
38	A	11.50	6.150	F.	Serge	56	3½	1.125	4.078	.408			
				B. L.	Mohair	32	1½	.285	.463	.009	4.223	1.927	
				S. L.	Sateen	40	¾	.135	.101	.002			
	B	13.50	6.261	F.	Cashmere	56	3½	1.110	4.023	.402			
				B. L.	Mohair	32	1½	.350	.569	.011	4.301	1.960	
				S. L.	Sateen	40	¼	.165	.124	.002			
	C	13.50	6.391	F.	Cashmere	56	3½	1.150	4.168	.417			
				B. L.	Mohair	32	1½	.350	.569	.011	4.431	1.960	
				S. L.	Sateen	40	¼	.165	.124	.002			
	D	15.50	7.939	F.	Serge	56	3½	1.625	5.688	.569			
				B. L.	Mohair	32	1½	.375	.609	.012	5.852	2.087	
				S. L.	Sateen	40	¼	.185	.139	.003			
	E	15.50	5.751	F.	Woolen crash	56	3½	1.000	3.750	.375			
39	A			B. L.	Alpaca	32	2½	.360	.810	.081	4.248	1.463	.040
				S. L.	Sateen	40	¼	.200	.150	.006			

[a] Sleeve lining included in cost of trimming.

[b] Sleeve lining included in body lining.

[c] Materials purchased net. No discount.

TABLE 32.—DESCRIPTION AND DETAILS OF COST OF CLOTH, BODY LINING, SLEEVE LINING, AND TRIMMINGS USED IN UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Gross price.	Total net cost of all materials used in unit.	F., fabric; B. L., body lining; S. L., sleeve lining.	Cloth and linings used in unit.				Cost of all materials used.				
					Description.	Width in inches.	Yards.	Price per yard.	Cloth and linings.			Trimmings and sundries.	Freight.
									Gross cost.	Discount.	Net cost.		
40	B	$16.50	$6.148	F.	Woolen crash	56	3¼	$1.200	$4.000	$0.400	$4.453	$1.655	$0.040
				B. L.	Alpaca	32	2½	.350	.788	.079			
				S. L.	Sateen	40	¼	.200	.150	.006			
	C	17.50	6.603	F.	Worsted	56	3¼	1.200	4.350	(a)	5.203	1.350	.050
				B. L.	Alpaca	32	2½	.350	.788	.079			
				S. L.	Sateen	40	¼	.200	.150	.006			
	D	18.50	7.354	F.	Cashmere	56	3½	1.400	5.250	.525	5.754	1.550	.050
				B. L.	Alpaca	32	2½	.425	.956	.096			
				S. L.	Sateen	40	¼	.235	.176	.007			
	E	20.00	8.022	F.	Cashmere	56	3½	1.520	5.890	.589	6.446	1.516	.060
				B. L.	Alpaca	32	2½	.480	1.080	.108			
				S. L.	Sateen	40	¼	.240	.180	.007			
	F	22.00	8.645	F.	Unfinished worsted	56	3¼	1.640	5.740	(a)	6.875	1.710	.060
				B. L.	Alpaca	54	1½	.950	1.069	.107			
				S. L.	Sateen	40	¼	.240	.180	.007			
41	A	10.00	5.162	F.	Cashmere	54	3½	.975	3.402	.340	3.744	1.418	.....
				B. L.	Mohair	32	2	.325	.650	.065			
				S. L.	Sateen	40	¼	.130	.087	(a)			
	B	12.50	6.326	F.	Worsted	54	3½	1.250	4.531	.453	4.808	1.518	.....
				B. L.	Mohair	32	2	.350	.700	.070			
				S. L.	Sateen	40	¾	.150	.100	(a)			
	C	13.50	6.985	F.	Worsted	54	3½	1.475	5.162	.515	5.435	1.550	.....
				B. L.	Mohair	32	2	.375	.750	.075			
				S. L.	Sateen	40	¾	.170	.113	(a)			
	D	15.00	7.497	F.	Worsted	54	3½	1.575	5.502	.550	5.802	1.695	.....
				B. L.	Mohair	32	2	.400	.800	.080			
				S. L.	Sateen	40	¾	.180	.120	(a)			
	E	16.50	8.960	F.	Worsted	54	3½	2.075	6.909	.691	7.161	1.799	.....
				B. L.	Mohair	32	2	.450	.900	.090			
				S. L.	Sateen	40	¾	.200	.133	(a)			
	F	11.00	4.263	F.	Cashmere	55	3½	.860	2.903	.420	2.973	1.270	.020
				B. L.	Alpaca	32	1½	.300	.450	.060			
				S. L.	Sateen	40	¾	.160	.120	.020			
42	B	13.50	4.878	F.	Cheviot	56	3⅜	.980	3.308	.470	3.408	1.440	.030
				B. L.	Alpaca	32	1½	.340	.510	.070			
				S. L.	Sateen	40	¾	.200	.150	.020			
	C	15.00	5.610	F.	Worsted	55	3¼	1.280	4.200	.600	4.150	1.430	.030
				B. L.	Alpaca	32	1½	.340	.510	.080			
				S. L.	Sateen	40	¼	.200	.150	.030			
	D	16.50	6.785	F.	Worsted	56	3½	1.560	5.265	.750	5.245	1.500	.040
				B. L.	Alpaca	32	1⅝	.400	.650	.080			
				S. L.	Sateen	40	¾	.240	.180	.020			
	E	20.00	8.130	F.	Worsted	58	3½	2.040	6.630	.950	6.540	1.540	.050
				B. L.	Alpaca	32	1½	.520	.780	.120			
				S. L.	Sateen	40	¼	.320	.240	.040			
	F	25.00	11.672	F.	Worsted	58	3½	3.300	10.312	1.470	9.972	1.630	.070
				B. L.	Alpaca	32	1½	.620	.930	.130			
				S. L.	Sateen	40	¼	.520	.390	.060			
43	A	6.50	3.275	F.	Serge	58	3½	.850	2.763	.276	3.025	.250	.....
				B. L.	.....do	27	2	.265	.530	.037			
				S. L.	Sateen	40	¾	.090	.045	.000			
	B	10.00	5.264	F.	Fancy worsted	58	3½	1.450	4.713	.471	4.864	.400	.....
				B. L.	Serge	27	2	.300	.600	.042			
				S. L.	Sateen	40	½	.130	.065	.001			
44	A	10.00	4.659	F.	Cashmere	56	3½	1.025	3.331	.233	3.759	.900	.....
				B. L.	Alpaca	32	2½	.280	.630	.050			
				S. L.	Sateen	40	¾	.110	.083	.002			
	B	12.50	6.030	F.	Fancy worsted	56	3½	1.375	4.469	.313	4.880	1.150	.....
				B. L.	Alpaca	32	2½	.300	.675	.054			
				S. L.	Sateen	40	¾	.140	.105	.002			
45	A	8.00	4.599	F.	Worsted	56	3½	1.050	3.415	.342	3.599	1.000	.....
				B. L.	Alpaca	32	1½	.240	.360	.030			
				S. L.	Cotton	40	2	.100	.200	.004			
	B	8.00	4.614	F.	Worsted	56	3½	1.050	3.415	.342	3.614	1.000	.....
				B. L.	Serge	32	1½	.250	.375	.030			
				S. L.	Cotton	40	2	.100	.200	.004			
	C	9.00	5.137	F.	Worsted	56	3½	1.175	3.818	.382	4.035	1.102	.....
				B. L.	Alpaca	32	1½	.275	.413	.030			
				S. L.	Cotton	40	2	.110	.220	.004			
	D	10.00	5.661	F.	Worsted	56	3½	1.300	4.225	.423	4.461	1.200	.....
				B. L.	Alpaca	32	1½	.300	.450	.036			
				S. L.	Cotton	40	2	.125	.250	.005			
	E	8.00	4.610	F.	Kersey	56	2¾	1.000	2.750	.275	3.261	1.349	.....
				B. L.	Serge	32	1⅜	.275	.481	.038			
				S. L.	Mohair	40	1⅜	.200	.350	.007			
	F	7.50	4.420	F.	Tibet	56	2½	1.125	3.094	.309	3.571	.849	.....
				B. L.	Venetian	32	1⅜	.275	.481	.038			
				S. L.	Mohair	40	1⅜	.200	.350	.007			
46	A	2.50	1.311	F.	Serge	56	1½	1.000	1.250	.089	1.161	.150	.....
				B. L.	....do	56	3½	1.000	3.250	.228	4.015	.250	.....
	B	7.50	4.265	F.	....do	28	3	.300	.900	.018			
				S. L.	Sateen	40	½	.150	.113	.002			
47	A	12.50	5.801	F.	Mixed worsted	54	3½	1.400	4.657	.320	5.091	.700	.010
				B. L.	Alpaca	36	2½	.350	.788	.055			
				S. L.	Cotton	40	¼	.150	.113	.002			

a Materials purchased net. No discount.

TABLE 32.—DESCRIPTION AND DETAILS OF COST OF CLOTH, BODY LINING, SLEEVE LINING, AND TRIMMINGS USED IN UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Gross price.	Total net cost of all materials used in unit.	F., fabric; B. L., body lining; S. L., sleeve lining.	Cloth and linings used in unit.				Cost of all materials used.				
					Description.	Width in inches.	Yards.	Price per yard.	Cloth and linings.			Trimmings and sundries.	Freight.
									Gross cost.	Discount.	Net cost.		
47	B	$13.50	$6.498	F.	Mixed worsted	54	3½	$1.400	$4.667	$0.320	$5.888	$0.600	$0.010
				B. L.	Alpaca	36	2¼	.350	.788	.055			
				S. L.	Silk	40	⅜	1.100	.825	.017			
	C	15.00	7.230	F.	Mixed worsted	54	3½	1.400	4.667	.320	6.620	.600	.010
				B. L.	Silk	22	2¼	.700	1.575	.110			
				S. L.	do	22	¾	1.100	.825	.017			
	D	10.00	4.337	F.	Cashmere	54	3½	.900	3.150	.220	3.577	.750	.010
				B. L.	Alpaca	36	2¼	.270	.608	.042			
				S. L.	Sateen	40	⅜	.110	.083	.002			
	E	13.50	7.224	F.	Fancy cheviot	54	2¾	1.750	4.813	.337	6.614	.600	.010
				B. L.	Satin	36	(a)	(a)	2.300	.162			
				S. L.[b]	do	36							
	F	13.50	7.348	F.	Covert	54	2¾	1.800	4.950	.350	6.738	.600	.010
				B. L.	Satin	36	(a)	(a)	2.300	.162			
				S. L.[b]	do	36							
49	A	10.00	5.282	F.	Serge	56	3⅜	1.150	3.881	.388	4.250	1.000	.032
				B. L.	Alpaca	32	2⅛	.300	.638	.064			
				S. L.	Sateen	40	1½	.125	.187	.004			
	B	10.00	5.061	F.	Cashmere	54	3½	1.050	3.675	.364	4.071	0.960	.030
				B. L.	Serge	32	2⅛	.300	.638	.064			
				S. L.	Sateen	40	1½	.125	.190	.004			
	C	12.00	5.985	F.	Worsted	54	3½	1.300	4.225	.423	4.690	1.250	.045
				B. L.	Alpaca	32	2⅛	.350	.743	.075			
				S. L.	Sateen	40	1½	.150	.225	.005			
				F.	Fancy worsted	56	3½	.900	2.925	.203			
50	A	7.25	3.652	B. L.	Serge	32	2½	.250	.625	.050	3.297	.355	.....
				S. L.[c]									
	B	10.00	5.417	F.	Fancy worsted	56	3½	1.350	4.388	.307	4.817	.600	.....
				B. L.	Serge	32	2⅛	.320	.800	.064			
				S. L.[c]									
	C	8.00	3.951	F.	All-wool coating	56	2⅝	1.000	2.750	.193	3.201	.750	.....
				B. L.	Serge	32	2½	.280	.700	.056			
				S. L.[c]									
51	A	1.50	.713	F.	Cotton worsted	56	1½	.450	.563	(d)	.563	.150	.....
	B	1.50	.713	F.	Union	56	1½	.450	.563	(d)	.563	.150	.....
	C	2.00	.961	F.	Cashmere	56	1½	.625	.781	(d)	.781	.180	.....
	D	2.50	1.375	F.	Worsted	56	1½	.900	1.125	(d)	1.125	.250	.....
52	A	7.50	3.658	F.	Cashmere	54	3½	.750	2.438	(d)	2.891	.767	.....
				B. L.	Alpaca	30	1⅜	.235	.382	(d)			
				S. L.	Twill	40	¼	.095	.071	(d)			
	B	9.50	5.355	F.	Worsted	54	3½	1.100	3.575	(d)	4.140	1.215	.....
				B. L.	Alpaca	30	1⅜	.290	.471	(d)			
				S. L.	Sateen	40	⅛	.125	.094	(d)			
	C	7.50	4.603	F.	Kersey	54	2¾	.950	2.613	(d)	3.633	.970	.....
				B. L.	Serge	30	3	.240	.720	(d)			
				S. L.	Venetian	30	1	.300	.300	(d)			
	D	9.50	4.306	F.	Cheviot	54	3	1.000	3.000	(d)	3.956	.350	.....
				B. L.	Satin	22	⅝	.450	.281	(d)			
				S. L.	do	22	1½	.450	.675	(d)			
53	A	1.50	.744	F.	Worsted	54	1½	.560	.700	.056	.644	.100	.....
	B	2.50	1.158	F.	Cashmere	54	1½	.850	1.063	.085	.978	.180	.....
	C	4.00	1.968	F.	Worsted	54	1⅜	1.400	1.867	.149	1.718	.250	.....
54	A	12.00	5.499	F.	Cashmere	56	3½	.950	3.325	.333	3.799	1.700	.....
				B. L.	Mohair	32	1½	.450	.675	.068			
				S. L.	Sateen	30	1	.200	.200	(d)			
	B	12.00	5.653	F.	Worsted	56	3½	.989	3.462	.346	3.991	1.662	.....
				B. L.	Mohair	32	1½	.500	.750	.075			
				S. L.	Sateen	30	1	.200	.200	(d)			
	C	13.50	6.474	F.	Worsted	56	3½	1.275	4.463	.446	4.959	1.515	.....
				B. L.	Mohair	32	1½	.550	.825	.083			
				S. L.	Sateen	30	1	.200	.200	(d)			
	D	13.50	7.261	F.	Cashmere	56	2½	.960	2.400	.240	6.210	1.051	.....
				B. L.	Silk	30	3	1.500	4.500	.450			
				S. L.[b]	do	30							
	E	14.00	6.716	F.	Knitted wool	56	3½	1.400	4.550	.455	6.120	.596	.....
				B. L.	Silk	30	1½	1.500	2.250	.225			
				S. L.[b]	do	30							
55	A	10.00	5.170	F.	Cashmere	54	3½	1.100	3.575	.286	4.100	1.070	.....
				B. L.	Serge	27	2	.320	.640	.013			
				S. L.	Cambric	40	1½	.125	.188	.004			
	B	7.50	3.686	F.	Cashmere	54	3½	.750	2.437	.195	2.936	.750	.....
				B. L.	Serge	27	2	.275	.550	.011			
				S. L.	Cambric	40	1½	.105	.158	.003			
	C	10.00	4.513	F.	Cashmere	54	2¾	1.100	3.025	.242	3.763	.750	.....
				B. L.	Silk	27	1	.500	.500	.010			
				S. L.	do	22	1	.500	.500	.010			
	D	7.50	3.646	F.	Cashmere	54	2¾	.750	2.063	.165	2.996	.650	.....
				B. L.	Venetian	27	2½	.320	.800	.016			
				S. L.	do	27	1	.320	.320	.006			
56	A	7.00	3.770	F.	Cashmere	56	3½	.850	2.763	.193	3.145	.625	.....
				B. L.	Serge	32	2½	.250	.625	.050			
				S. L.[c]	Sateen								
	B	10.00	5.711	F.	Fancy worsted	56	3½	1.360	4.420	.309	4.847	.864	.....
				B. L.	Serge	32	2½	.320	.800	.064			
				S. L.[c]									
	C	12.00	6.859	F.	Worsted	56	3½	1.740	5.655	.396	5.995	.864	.....
				B. L.	Serge	32	2½	.320	.800	.064			
				S. L.[c]									

[a] Data not reported. [b] Sleeve lining included in body lining. [c] Sleeve lining included in cost of trimming. [d] Materials purchased net. No discount.

TABLE 32.—DESCRIPTION AND DETAILS OF COST OF CLOTH, BODY LINING, SLEEVE LINING, AND TRIMMINGS USED IN UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Gross price.	Total net cost of all materials used in unit.	F., fabric; B. L., body lining; S. L., sleeve lining.	Cloth and linings used in unit.				Cost of all materials used.				
					Description.	Width in inches.	Yards.	Price per yard.	Cloth and linings.			Trimmings and sundries.	Freight.
									Gross cost.	Discount.	Net cost.		
57	A	$7.50	$4.824	F.	Serge	56	3¼	$1.175	$3.917	$0.274	$4.227	$0.597	
				B. L.	Mohair	32	2	.275	.550	.039			
				S. L.	Sateen	40	¼	.100	.075	.002			
	B	7.50	4.436	F.	Cheviot	56	3¼	1.050	3.500	.245	3.839	.597	
				B. L.	Mohair	32	2	.275	.550	.039			
				S. L.	Sateen	40	¼	.100	.075	.002			
	C	8.50	5.854	F.	Serge	56	3½	1.475	4.917	.344	5.157	.697	
				B. L.	Mohair	32	2	.275	.550	.039			
				S. L.	Sateen	40	¼	.100	.075	.002			
	D	7.50	4.895	F.	Kersey	56	2¾	1.250	3.438	.241	4.145	.750	
				B. L.	Venetian	32	3	.250	.750	.053			
				S. L.	Venetian	32	1	.270	.270	.019			
59	A	8.50	3.653	F.	Cheviot	54	3½	.660	2.310	.185	2.583	1.060	$0.010
				B. L.	Alpaca	32	1¾	.260	.422	.034			
				S. L.	Twill	40	¼	.095	.071	.001			
	B	11.50	5.116	F.	Worsted	54	3½	1.050	3.675	.290	3.944	1.140	.032
				B. L.	Alpaca	32	1¾	.310	.503	.040			
				S. L.	Sateen	40	¼	.130	.098	.002			
	C	13.50	5.561	F.	Cheviot	54	3½	1.120	3.920	.314	4.221	1.330	.010
				B. L.	Alpaca	32	1¾	.360	.540	.043			
				S. L.	Sateen	40	¼	.160	.120	.002			
	D	13.50	5.398	F.	Cheviot	54	3½	1.050	3.675	.290	4.026	1.350	.022
				B. L.	Alpaca	32	1¾	.350	.568	.045			
				S. L.	Sateen	40	¼	.160	.120	.002			
	E	12.50	5.202	F.	Kersey	54	2½	1.250	3.125	.250	4.365	.820	.017
				B. L.	Serge	32	2¼	.325	.853	.067			
				S. L.	Sateen	22	1½	.510	.765	.061			
61	A	7.00	3.625	F.	Cashmere	54	3½	.650	2.275	(a)	2.748	.877	
				B. L.	Serge	32	1¾	.270	.405	(a)			
				S. L.	Twill	40	¼	.090	.068	(a)			
	B	9.00	4.975	F.	Cashmere	54	3½	.950	3.325	(a)	3.903	1.072	
				B. L.	Alpaca	32	1¾	.330	.495	(a)			
				S. L.	Sateen	40	¼	.110	.083	(a)			
	C	11.00	6.050	F.	Worsted	54	3½	1.200	4.200	(a)	4.905	1.145	
				B. L.	Alpaca	32	1½	.400	.600	(a)			
				S. L.	Sateen	40	¼	.140	.105	(a)			
	D	13.00	7.250	F.	Worsted	54	3½	1.500	5.250	(a)	6.113	1.137	
				B. L.	Alpaca	32	1¼	.500	.750	(a)			
				S. L.	Sateen	40	¼	.150	.113	(a)			
62	A	7.00	3.989	F.	Worsted	56	3½	.900	2.925	(a)	3.489	.500	
				B. L.	Alpaca	32	2	.260	.520	.010			
				S. L.	Sateen	40	¼	.110	.055	.001			
	B	10.50	5.798	F.	Worsted	56	3¼	1.300	4.225	(a)	5.048	.750	
				B. L.	Alpaca	32	2	.380	.760	.015			
				S. L.	Sateen	40	¼	.160	.080	.002			
63	A	7.25	3.425	F.	Melton	54	3	.600	1.800	(a)	2.700	.725	
				B. L.	Mohair	32	3	.225	.675	(a)			
				S. L.	Venetian	32	1	.225	.225	(a)			
	B	10.50	5.699	F.	Cheviot	54	3	1.100	3.300	(a)	4.719	.980	
				B. L.	Mohair	32	3	.248	.744	(a)			
				S. L.	Satin	22	1½	.450	.675	(a)			
	C	13.50	6.734	F.	Cheviot	54	3	1.400	4.200	(a)	5.754	.980	
				B. L.	Mohair	32	3	.293	.879	(a)			
				S. L.	Satin	22	1½	.450	.675	(a)			
	D	1.50	.818	F.	Cashmere	54	1½	.550	.688	(a)	.688	.130	
	E	2.25	1.056	F.	Cashmere	54	1½	.725	.906	(a)	.906	.150	
64	A	7.00	3.833	F.	Serge	56	3½	.875	2.843	.287	3.239	.564	
				B. L.	Serge	32	2¼	.270	.608	(a)			
				S. L.	Sateen	40	¼	.100	.075	(a)			
	B	9.00	5.159	F.	Fancy worsted	56	3½	1.160	3.770	(a)	4.589	.570	
				B. L.	Alpaca	32	2¼	.320	.720	(a)			
				S. L.	Sateen	40	¼	.132	.099	(a)			
	C	10.00	5.663	F.	Fancy worsted	56	3½	1.220	3.965	(a)	4.860	.803	
				B. L.	Alpaca	32	2¼	.350	.788	(a)			
				S. L.	Sateen	40	¼	.143	.107	(a)			
	D	11.00	6.253	F.	Worsted	56	3½	1.400	4.550	(a)	5.445	.808	
				B. L.	Alpaca	32	2¼	.350	.788	(a)			
				S. L.	Sateen	40	¼	.143	.107	(a)			
	E	7.50	3.412	F.	Kersey	56	2¾	.750	1.969	.197	2.762	.650	
				B. L.	Serge	32	2¼	.280	.735	(a)			
				S. L.	Lustrene	44	¼	.340	.255	(a)			
	F	9.00	5.052	F.	Melton	56	2¾	1.250	3.281	.328	4.172	.880	
				B. L.	Mohair	32	2¼	.330	.866	(a)			
				S. L.	Satin	22	¼	.470	.353	(a)			

a Materials purchased net. No discount.

PROPORTIONATE COST OF VARIOUS MATERIALS.

Table 33, which follows, shows by grades of garments the proportionate cost of materials entering into all the units for which cost data were obtained. The range of gross prices of these grades appear in this table, but the average price of each grade appears in Table 30. The cost of materials is based on the average total cost for each group. Separate data are shown for the fabric, body lining, sleeve lining, trimmings, and sundries, and cost of freight for delivery of materials. Trimmings and sundries include items such as canvas, haircloth, buttons, thread, wigan, velvet collars, etc.

TABLE 33.—PROPORTIONATE COST OF MATERIALS OF LOW, MEDIUM, AND HIGH GRADE SUITS AND OVERCOATS, AND LOW AND HIGH GRADE TROUSERS, BASED ON AVERAGE NET COST OF ALL MATERIALS.

[NOTE.—The figures in the box headings show the range of gross prices.]

THREE-PIECE SUITS.

Items.	Under $8, 18 styles.	$8 to $15, 83 styles.	$15 and over, 43 styles.	Under $8, 18 styles.	$8 to $15, 83 styles.	$15 and over, 43 styles.
Average net cost of all materials	$3.741	$5.406	$7.733	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00
Net cost of fabric (cloth)	2.541	3.582	5.078	67.92	66.26	65.67
Net cost of body lining	.508	.586	.859	13.58	10.84	11.11
Net cost of sleeve lining	.085	.119	.212	2.27	2.20	2.74
Net cost of trimmings and sundries	.607	1.111	1.558	16.23	20.55	20.15
Freight	.....	.008	.026	.....	0.15	0.33

OVERCOATS.

Items.	Under $8, 7 styles.	$8 to $15, 31 styles.	$15 and over, 10 styles.	Under $8, 7 styles.	$8 to $15, 31 styles.	$15 and over, 10 styles.
Average net cost of all materials	$4.002	$5.724	$7.780	*Per cent.* 100.00	*Per cent.* 100.00	*Per cent.* 100.00
Net cost of fabric (cloth)	2.239	3.176	3.822	55.95	55.49	49.13
Net cost of body lining	.712	1.138	1.674	17.79	19.88	21.51
Net cost of sleeve lining	.241	.469	.750	6.02	8.19	9.64
Net cost of trimmings and sundries	.810	.934	1.509	20.24	16.32	19.40
Freight	.....	.007	.025	.....	0.12	0.32

SEPARATE TROUSERS.

Items.	Under $2.75, 11 styles.	$2.75 and over, 7 styles.	Under $2.75, 11 styles.	$2.75 and over, 7 styles.
Average net cost of all materials	$0.991	$2.070	*Per cent.* 100.00	*Per cent.* 100.00
Net cost of fabric (cloth)	.824	1.816	83.15	87.73
Net cost of trimmings and sundries	.167	.254	16.85	12.27

In suits, the cost of fabric amounts to about two-thirds of the total material cost; in overcoats, to about half of the total cost; and in trousers, to about seven-eighths of the total cost. The high percentage of fabric cost in trousers is due to the fact that no items of lining cost enter into their manufacture. Suits have a greater percentage of cost for trimmings and sundries than for body and sleeve linings combined. Overcoats, however, show a larger percentage of cost for linings than for trimmings and sundries.

The percentage of fabric cost is highest for the low grades of suits and overcoats and decreases gradually, showing the lowest cost for the high grades. Trousers, however, show a greater cost for the high grade than for the low.

COST OF DIRECT LABOR IN UNIT.

Table 34, which follows, is supplementary to Table 26. It shows in detail, by place of manufacture, the cost of the different direct-labor operations in making each style for which data were furnished. The cost of the operations of sponging, examining, and cutting is given for the unit as a whole. Data for the three garments of a suit, viz, the coat, vest, and pants, are given separately, wherever possible. The column "Contract work," shows the total amount paid for the garment if made in a contract shop.

TABLE 34.—DETAILS OF COST OF DIRECT LABOR OF UNITS, BY ESTABLISHMENTS AND STYLES.

[NOTE.—The styles are designated by letters for convenience of reference to other tables. The same letter applied to the product of different establishments does not indicate identity or even similarity of style.]

Establishment No.	Styles.	Where made.	Gross price.	Cost of direct labor.									
				Total direct labor and contract work for unit.	Sponging and examining.	Cutting.	Coat, trousers, vest, overcoat, separate trousers.	Operating.	Handwork.	Pressing.	Other direct labor.	Contract work.	Total direct labor and contract work for each garment in unit.[a]
2	A.	New York	$2.25	$0.543	$0.013	$0.100	S. T	$0.140	$0.070	$0.100	$0.120		[b] $0.543
	B.	do	2.75	.543	.013	.100	S. T	.140	.070	.100	.120		[b] .543
	C.	do	3.50	.543	.013	.100	S. T	.140	.070	.100	.120		[b] .543
3	A.	Philadelphia	9.90	2.184	.034	.200	C	(c)	(c)	(c)	(c)		1.200
							T	(c)	(c)	(c)	(c)		.500
							V	(c)	(c)	(c)	(c)		.250
	B.	do	6.90	1.884	.034	.200	C	(c)	(c)	(c)	(c)		1.000
							T	(c)	(c)	(c)	(c)		.400
							V	(c)	(c)	(c)	(c)		.250
	C.	do	4.90	.954	.034	.200	C	(c)	(c)	(c)	(c)		.350
							T	(c)	(c)	(c)	(c)		.220
							V	(c)	(c)	(c)	(c)		.150
	D.	do	3.90	.954	.034	.200	C	(c)	(c)	(c)	(c)		.350
							T	(c)	(c)	(c)	(c)		.220
							V	(c)	(c)	(c)	(c)		.150
4	A.	New York	2.00	.683	.013	.070	S. T	.210	.230	.080	.080		[b] .683
	B.	do	2.95	.720	.040	.080	S. T	.210	.230	.080	.080		[b] .720
	C.	do	3.50	.770	.040	.080	S. T	.240	.240	.090	.080		[b] .770
	D.	do	3.75	.865	.040	.100	S. T	.270	.275	.100	.080		[b] .865
	E.	do	4.50	.865	.040	.100	S. T	.270	.275	.100	.080		[b] .865
5	A.	do	8.00	1.803	.033	.080	C	.290	.500	.225	.050		1.065
							T	.195	.070	.070	.020		.355
							V	.105	.115	.040	.010		.270
	B.	do	11.00	2.008	.033	.080	C	.290	.630	.270	.050		1.240
							T	.215	.080	.070	.020		.385
							V	.105	.115	.040	.010		.270
	C.	do	8.00	1.173	.028	.080	O	.290	.500	.225	.050		1.173
	D.	do	11.00	1.348	.028	.080	O	.290	.630	.270	.050		1.348
9	A.	Rochester	16.75	5.200	(d)	.750	C	(c)	(c)	(c)	(c)		3.050
							T	(c)	(c)	(c)	(c)		.750
							V	(c)	(c)	(c)	(c)		.650
	B.	do	17.75	5.600	(d)	.750	C	(c)	(c)	(c)	(c)		3.400
							T	(c)	(c)	(c)	(c)		.750
							V	(c)	(c)	(c)	(c)		.700
	C.	do	18.75	6.150	(d)	.750	C	(c)	(c)	(c)	(c)		3.900
							T	(c)	(c)	(c)	(c)		.800
							V	(c)	(c)	(c)	(c)		.700
	D.	do	20.25	6.250	(d)	.750	C	(c)	(c)	(c)	(c)		3.900
							T	(c)	(c)	(c)	(c)		.850
							V	(c)	(c)	(c)	(c)		.750
	E.	do	14.50	4.500	(d)	.750	O	(c)	(c)	(c)	(c)		[b] 4.500
	F.	do	18.50	5.250	(d)	.750	O	(c)	(c)	(c)	(c)		[b] 5.250
10	A.	New York	12.50	4.830	(d)	1.000	C	.555	.940	.670	.490		2.655
							T	.140	.270	.100	.070		.580
							V	.200	.205	.100	.090		.595
	B.	do	16.50	5.350	(d)	1.150	C	.400	1.830	.670			2.900
							T	.150	.330	.100	.070		.650
							V	.240	.220	.100	.090		.650
	C.	do	20.00	6.150	(d)	1.300	C	.400	2.280	.670			3.350
							T	.150	.400	.120	.080		.750
							V	.290	.270	.100	.090		.750
	D.	do	12.50	3.650	(d)	.750	O	.550	1.600	.750			[b] 3.650
	E.	do	16.00	5.150	(d)	1.050	O	.700	2.500	.900			[b] 5.150
11	A.	Milwaukee	10.00	2.302	.029	.668	C	.229	.128	.243	.404		1.004
							T	.154		.074	.138		.366
							V	.100		.061	.074		.235
	B	do	13.50	2.765	.029	.668	C	.345	.206	.336	.525		1.412
							T	.169		.094	.138		.401
							V	.100		.061	.094		.255
	C	do	16.50	3.488	.029	.668	C	.311	.258	.540	.856		1.965
							T	.169		.094	.138		.401
							V	.120		.061	.244		.425
	D	do	13.50	2.051	.021	.455	O	.413	.269	.203	.690		[b] 2.051
13	A	Cincinnati	7.50	1.870	.045	.600	C					$0.700	.700
							T					.325	.325
							V					.200	.200
	B	do	8.50	2.070	.045	.600	C					.900	.900
							T					.325	.325
							V					.200	.200
	C	do	10.00	2.420	.045	.650	C	1.100					1.100
							T					.400	.400
							V					.225	.225
	D	do	12.50	2.895	.045	.750	C	1.450					1.450
							T					.400	.400
							V					.250	.250
	E	do	7.50	1.845	.045	.450	O					1.350	[b] 1.845
	F	do	10.00	2.795	.045	.500	O					2.250	[b] 2.795
14	A	Milwaukee	10.00	2.685	.085	.600	C					1.250	1.250
							T	.142	.130	.108	.060		.440
							V	.110	.100	.077	.023		.310
	B	do	12.00	3.076	.085	.600	C					1.500	1.500
							T	.170	.155	.130	.073		.528
							V	.133	.115	.090	.025		.363

[a] Exclusive of sponging, examining, and cutting. [b] Includes cost of examining, sponging, and cutting. [c] Data not reported. [d] Included in cost of cutting.

TABLE 34.—DETAILS OF COST OF DIRECT LABOR OF UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Where made.	Gross price.	Cost of direct labor.									
				Total direct labor and contract work for unit.	Sponging and examining.	Cutting.	Coat, trousers, vest, overcoat, separate trousers.	Operating.	Handwork.	Pressing.	Other direct labor.	Contract work.	Total direct labor and contract work for each garment in unit.[a]
14	C	Milwaukee	$13.50	$2.986	$0.085	$0.600	C	$0.350	$0.544	$0.316	$0.158		$1.368
							T	.170	.155	.130	.073		.528
							V	.145	.135	.100	.025		.405
15	A	Chicago	10.50	2.608	.088	.650	C					$1.100	1.100
							T					.450	.450
							V					.320	.320
	B	do	13.50	3.388	.088	.650	C					1.750	1.750
							T					.450	.450
							V					.450	.450
	C	do	15.50	3.619	.088	.650	C	.275	.983	.395	.230		1.883
							T	.203	.215	.115			.533
							V					.465	.465
	D	do	17.50	3.619	.088	.650	C	.275	.983	.395	.230		1.883
							T	.203	.215	.115			.533
							V					.465	.465
	E	do	20.00	3.844	.088	.650	C	.275	1.193	.395	.230		2.093
							T	.203	.215	.115			.533
							V					.480	.480
	F	do	25.00	3.864	.088	.650	C	.275	1.193	.395	.230		2.093
							T	.203	.215	.115			.533
							V					.500	.500
	G	do	13.50	2.378	.075	.300	O	.494	1.097	.308	.104		[b] 2.378
	H	do	15.50	2.899	.069	.300	O	.398	1.204	.546	.382		[b] 2.899
	I	do	17.50	3.024	.088	.300	O	.468	1.492	.533	.143		[b] 3.024
17	A	Rochester	13.50	4.540	.090	.850	C	(c)	(c)	(c)	(c)		2.330
							T	(c)	(c)	(c)	(c)		.700
							V	(c)	(c)	(c)	(c)	.570	.570
	B	do	15.50	4.790	.090	.850	C	(c)	(c)	(c)	(c)		2.500
							T	(c)	(c)	(c)	(c)		.750
							V	(c)	(c)	(c)	(c)	.600	.600
	C	do	18.50	5.420	.090	.850	C	(c)	(c)	(c)	(c)		3.000
							T	(c)	(c)	(c)	(c)		.850
							V	(c)	(c)	(c)	(c)	.630	.630
	D	do	21.00	5.420	.090	.850	C	(c)	(c)	(c)	(c)		3.000
							T	(c)	(c)	(c)	(c)		.850
							V	(c)	(c)	(c)	(c)	.630	.630
	E	do	14.00	3.840	.090	.750	O	(c)	(c)	(c)	(c)		[b] 3.840
	F	do	18.00	4.590	.090	.750	O	(c)	(c)	(c)	(c)		[b] 4.590

18	A	Cincinnati	15.00	3.680	.025	.750	C	.400	1.030	.380			1.810
							T					.675	.675
							V					.420	.420
	B	do	12.50	3.155	.025	.700	C	.350	.920	.290			1.560
							T					.500	.500
							V					.370	.370
	C	do	10.00	2.335	.025	.600	C					1.090	1.090
							T					.350	.350
							V					.270	.270
	D	do	8.75	2.085	.025	.500	C					.990	.990
							T					.325	.325
							V					.245	.245
	E	do	12.50	2.535	.025	.600	O	.400	1.080	.430			[b] 2.535
	F	do	10.00	2.070	.025	.500	O					1.545	[b] 2.070
22	A	New York	10.50	3.185	.035	.500	C					1.750	1.750
							T					.500	.500
							V					.400	.400
	B	do	13.50	3.885	.035	.500	C					2.250	2.250
							T					.600	.600
							V					.500	.500
23	A	do	13.50	4.855	(d)	.680	C	.464	1.758	.563	.190		2.975
							T					.600	.600
							V					.600	.600
	B	do	16.50	4.855	(d)	.680	C	.464	1.758	.563	.190		2.975
							T					.600	.600
							V					.600	.600
	C	do	22.50	6.308	(d)	.745	C	.539	2.878	.794	.127		4.338
							T					.600	.600
							V					.625	.625
	D	do	25.50	6.308	(d)	.745	C	.539	2.878	.794	.127		4.338
							T					.600	.600
							V					.625	.625
	E	do	13.50	4.286	(d)	.630	O	.680	2.156	.790	.030		[b] 4.286
	F	do	16.50	4.286	(d)	.630	O	.680	2.156	.790	.030		[b] 4.286
24	A	New York	22.50	5.709	.109	1.100	C	.420	2.140	.640			3.200
							T					.700	.700
							V					.600	.600
	B	do	21.00	5.631	.031	1.100	O	.570	3.030	.900			[b] 5.631
25	A	Baltimore	10.50	2.970	(e)	.400	C	.400	.485	.300	.465		1.650
							T	.200	.185	.090	.105		.580
							V					.340	.340
	B	do	12.50	3.300	(e)	.400	C	.500	.570	.320	.510		1.900
							T	.220	.185	.090	.105		.600
							V					.400	.400
	C	do	10.50	2.250	(e)	.250	O	.500	.610	.380	.510		[b] 2.250
	D	do	12.50	2.650	(e)	.250	O	.600	.820	.380	.600		[b] 2.650
26	A	New York	7.50	2.030	.035	.150	C					1.125	1.125
							T					.420	.420
							V					.300	.300

[a] Exclusive of sponging, examining, and cutting.
[b] Includes cost of examining, sponging, and cutting.
[c] Data not reported.
[d] Included in material cost.
[e] Included in cost of cutting.

TABLE 34.—DETAILS OF COST OF DIRECT LABOR OF UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Where made.	Gross price.	Cost of direct labor.									
				Total direct labor and contract work for unit.	Sponging and examining.	Cutting.	Coat, trousers, vest, overcoat, separate trousers.	Operating.	Handwork.	Pressing.	Other direct labor.	Contract work.	Total direct labor and contract work for each garment in unit.[a]
26	B	New York	$10.00	$2.785	$0.035	$0.250	C					$1.600	$1.600
							T					.520	.520
							V					.380	.380
27	A	do	10.50	3.039	.034	.180	C	$0.300	$0.920	$0.435	$0.220		1.875
							T					.550	.550
							V					.400	.400
	B	do	10.50	2.303	.028	.150	O	.400	1.020	.485	.220		[b] 2.303
	C	do	10.50	2.303	.028	.150	O	.400	1.020	.485	.220		[b] 2.303
28	A	do	7.50	2.100	.020	.250	C					1.200	1.200
							T					.380	.380
							V					.250	.250
	B	do	10.00	2.850	.020	.250	C					1.750	1.750
							T					.500	.500
							V					.330	.330
	C	do	12.00	2.850	.020	.250	C					1.750	1.750
							T					.500	.500
							V					.330	.330
	D	do	9.50	2.020	.020	.250	O					1.750	[b] 2.020
30	A	Cincinnati	15.00	4.170	.070	.650	C	.400	.930	.550	.350		2.250
							T		.100			.600	.700
							V	.070		.050	.050	.330	.500
	B	do	13.50	3.730	.030	.650	C	.550	.700	.450	.300		2.000
							T		.100			.550	.650
							V	.070			.020	.310	.400
	C	do	10.00	3.165	.070	.500	C				.300	1.350	1.650
							T		.100			.450	.550
							V	.070		.050	.050	.225	.395
	D	do	7.50	2.320	.070	.400	C	.050		.050		.950	1.050
							T		.100			.350	.450
							V	.050	.050	.050	.050	.150	.350
	E	do	13.50	3.130	.030	.600	O	.400	1.200	.550	.350		[b] 3.130
	F	do	10.00	2.780	.030	.500	O	.800	.700	.450	.300		[b] 2.780
33	A	New York	8.00	2.150	(c)	.250	C					1.150	1.150
							T					.450	.450
							V					.300	.300
	B	do	9.00	2.305	(c)	.250	C					1.250	1.250
							T					.480	.480
							V					.325	.325

	C	do	11.00	2.970	(c)	.300	C					1.800	1.800
							T					.520	.520
							V					.350	.350
34	A	Chicago	10.50	2.904	.155	.609	C	.328	.528	.317	.137		1.310
							T	.235	.112	.098	.045		.490
							V					.340	.340
	B	do	13.50	3.637	.155	.609	C	.438	.855	.395	.225		1.913
							T	.235	.112	.098	.045		.490
							V					.470	.470
	C	do	16.00	3.818	.155	.609	C	.448	.925	.395	.225		1.993
							T	.270	.123	.123	.045		.561
							V					.500	.500
	D	do	16.50	3.808	.155	.609	C	.448	.945	.395	.225		2.013
							T	.260	.123	.123	.045		.551
							V					.490	.490
	E	do	12.50	2.745	.107	.408	O	.480	.955	.500	.295		[b] 2.745
	F	do	16.50	3.250	.107	.408	O	.600	1.310	.530	.295		[b] 3.250
35	A	Rochester	12.50	4.000	(c)	.800	C	(d)	(d)	(d)	(d)		2.000
							T	(d)	(d)	(d)	(d)		.650
							V	(d)	(d)	(d)	(d)		.550
	B	do	13.50	4.300	(c)	.800	C	(d)	(d)	(d)	(d)		2.200
							T	(d)	(d)	(d)	(d)		.750
							V	(d)	(d)	(d)	(d)		.550
	C	do	14.50	4.300	(c)	.800	C	(d)	(d)	(d)	(d)		2.200
							T	(d)	(d)	(d)	(d)		.750
							V	(d)	(d)	(d)	(d)		.550
	D	do	15.50	4.150	(c)	.800	C	(d)	(d)	(d)	(d)		2.000
							T	(d)	(d)	(d)	(d)		.750
							V	(d)	(d)	(d)	(d)		.600
	E	do	16.50	5.150	(c)	.800	C	(d)	(d)	(d)	(d)		3.000
							T	(d)	(d)	(d)	(d)		.750
							V	(d)	(d)	(d)	(d)		.600
	F	do	17.50	5.150	(c)	.800	C	(d)	(d)	(d)	(d)		3.000
							T	(d)	(d)	(d)	(d)		.750
							V	(d)	(d)	(d)	(d)		.600
36	A	do	14.50	4.130	(c)	.700	C	(d)	(d)	(d)	(d)		2.150
							T	(d)	(d)	(d)	(d)		.780
							V	(d)	(d)	(d)	(d)		.500
	B	do	16.50	4.810	(c)	.700	C	(d)	(d)	(d)	(d)		2.650
							T	(d)	(d)	(d)	(d)		.840
							V	(d)	(d)	(d)	(d)		.620
	C	do	14.75	4.130	(c)	.700	C	(d)	(d)	(d)	(d)		2.150
							T	(d)	(d)	(d)	(d)		.780
							V	(d)	(d)	(d)	(d)		.500
	D	do	16.50	4.810	(c)	.700	C	(d)	(d)	(c)	(d)		2.650
							T	(d)	(d)	(d)	(d)		.840
							V	(d)	(d)	(d)	(d)		.620
	E	do	15.00	3.970	(c)	.470	O	(d)	(d)	(d)	(d)		[b] 3.970

[a] Exclusive of sponging, examining, and cutting.
[b] Includes cost of examining, sponging, and cutting.
[c] Included in cost of cutting.
[d] Data not reported.

TABLE 34.—DETAILS OF COST OF DIRECT LABOR OF UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Where made.	Gross price.	Cost of direct labor.									
				Total direct labor and contract work for unit.	Sponging and examining.	Cutting.	Coat, trousers, vest, overcoat, separate trousers.	Operating.	Handwork.	Pressing.	Other direct labor.	Contract work.	Total direct labor and contract work for each garment in unit.[a]
37	A	Baltimore	$10.50	$3.180	$0.060	$0.890	C	$0.200	$0.800	$0.200	$0.300		$1.500
							T	.070	.270	.060	.100		.500
							V	.050	.070	.060	.050		.230
	B	do	12.50	3.200	.060	.890	C	.200	.800	.200	.300		1.500
							T	.070	.270	.060	.100		.500
							V	.050	.070	.060	.070		.250
	C	do	15.50	4.175	.060	1.040	C	.300	1.050	.300	.600		2.250
							T	.070	.270	.060	.150		.550
							V	.050	.070	.060	.095		.275
	D	do	16.50	4.175	.060	1.040	C	.300	1.050	.303	.600		2.250
							T	.070	.270	.060	.150		.550
							V	.050	.070	.060	.095		.275
	E	do	15.00	3.160	.060	.850	O	.300	1.050	.350	.550		[b] 3.160
	F	do	12.50	2.910	.060	.850	O	.300	.800	.350	.550		[b] 2.910
38	A	do	11.50	2.831	.010	.540	C	.600	.450	.180	.120		1.350
							T	.245	.095	.068	.093		.501
							V	.150	.180	.050	.050		.430
	B	do	13.50	3.086	.010	.540	C	.600	.510	.200	.140		1.450
							T	.280	.143	.088	.145		656
							V	.150	.180	.050	.050		.430
	C	do	13.50	3.086	.010	.540	C	.600	.510	.200	.140		1.450
							T	.280	.143	.088	.145		.656
							V	.150	.180	050	.050		.430
	D	do	15.50	3.336	.010	.540	C	.720	.570	.260	.150		1.700
							T	.280	.143	.088	.145		.656
							V	.150	.180	.050	.050		.430
39	A	Chicago	15.50	4.233	.116	.573	C	.442	1.016	.602	.136		2.196
							T	.217	.207	.105	.039		.568
							V					$0.780	.780
	B	do	16.50	4.233	.116	.573	C	.442	1.016	.602	.136		2.196
							T	.217	.207	.105	.039		.568
							V					.780	.780
	C	do	17.50	4.233	.116	.573	C	.399	1.141	.604	.149		2.296
							T	.217	.207	.105	.039		.568
							V					.680	.680
	D	do	18.50	4.192	.116	.573	C	.393	1.091	.602	.136		2.225
							T	.210	.244	.105	.039		.598
							V					.680	.680
	E	do	20.00	4.292	.116	.573	C	.393	1.094	.602	.136		2.225
							T	.210	.244	.105	.039		.598
							V					.780	.780
	F	do	22.00	4.192	.116	.573	C	.393	1.094	.602	.136		2.225
							T	.210	.244	.105	.039		.598
							V					.680	.680
41	A	Rochester	10.00	2.850	(c)	.600	C					1.500	1.500
							T					.380	.380
							V					.370	.370
	B	do	12.50	3.393	(c)	.600	C					1.750	1.750
							T					.530	.530
							V					.513	.513
	C	do	13.50	3.463	(c)	.600	C					1.750	1.750
							T					.600	.600
							V					.513	.513
	D	do	15.00	3.713	(c)	.600	C					2.000	2.000
							T					.600	.600
							V					.513	.513
	E	do	16.50	4.263	(c)	.600	C					2.500	2.500
							T					.650	.650
							V					.513	.513
42	A	Chicago	11.00	2.796	(c)	.451	C	.376	.481	.375	.271		1.503
							T	.226	.059	.113	.069		.467
							V	.166	.075	.075	.059		.375
	B	do	13.50	3.158	(c)	.564	C	.393	.496	.375	.271		1.535
							T	.223	.162	.121	.074		.580
							V	.146	.168	.100	.065		.479
	C	do	15.00	3.251	(c)	.564	C	.304	.610	.441	.282		1.637
							T	.223	.162	.121	.074		.580
							V	.146	.168	.100	.056		.470
	D	do	16.50	3.242	(c)	.564	C	.308	.610	.441	.269		1.628
							T	.223	.162	.121	.074		.580
							V	.146	.168	.100	.056		.470
	E	do	20.00	4.893	(c)	.564	C	.723	1.111	.853	.493		3.180
							T	.211	.183	.121	.074		.589
							V	.135	.250	.110	.065		.560
	F	do	25.00	4.893	(c)	.564	C	.723	1.111	.853	.493		3.180
							T	.211	.183	.121	.074		.589
							V	.135	.250	.110	.065		.560
43	A	New York	6.50	1.623	.033	.050	C					.900	.900
							T					.380	.380
							V					.260	.260
	B	do	10.00	2.268	.033	.080	C					1.425	1.425
							T					450	.450
							V					280	.280
44	A	do	10.00	2.685	.035	.500	C					1.350	1.350
							T					.480	.480
							V					.320	.320
	B	do	12.50	3.245	.035	.500	C					1.800	1.800
							T					.530	.530
							V					.380	.380

[a] Exclusive of sponging, examining, and cutting.

[b] Includes cost of examining, sponging, and cutting.

[c] Included in cost of cutting.

TABLE 34.—DETAILS OF COST OF DIRECT LABOR OF UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Where made.	Gross price.	Cost of direct labor.									
				Total direct labor and contract work for unit.	Sponging and examining.	Cutting.	Coat, trousers, vest, overcoat, separate trousers.	Operating.	Handwork.	Pressing.	Other direct labor.	Contract work.	Total direct labor and contract work for each garment in unit.[a]
45	A	Philadelphia	$8.00	$1.770	$0.020	(b)	C					$1.050	$1.050
							T					.400	.400
							V					.300	.300
	B	do	8.00	1.770	.020	(b)	C					1.050	1.050
							T					.400	.400
							V					.300	.300
	C	do	9.00	1.820	.020	(b)	C					1.100	1.100
							T					.400	.400
							V					.300	.300
	D	do	10.00	2.070	.020	(b)	C					1.350	1.350
							T					.400	.400
							V					.300	.300
	E	do	8.00	1.370	.020	(b)	O					1.350	c 1.370
	F	do	7.50	1.270	.020	(b)	O					1.250	c 1.270
46	A	do	2.50	.605	.005	$0.200	T					.400	c .605
	B	do	7.50	1.930	.020	.150	C					1.050	1.050
							T					.450	.450
							V					.260	.260
47	A	do	12.50	3.060	.150	.600	C					1.450	1.450
							T					.500	.500
							V					.360	.360
	B	do	13.50	3.110	.150	.600	C					1.500	1.500
							T					.500	.500
							V					.360	.360
	C	do	15.00	3.310	.150	.700	C					1.600	1.600
							T					.500	.500
							V					.360	.360
	D	do	10.00	3.060	.150	.600	C					1.450	1.450
							T					.500	.500
							V					.360	.360
	E	do	13.50	2.400	.150	.500	O					1.750	c 2.400
	F	do	13.50	2.400	.150	.500	O					1.750	c 2.400
49	A	do	10.00	2.540	.050	.450	C					1.350	1.350
							T					.350	.350
							V					.340	.340
	B	do	10.00	2.660	.050	.450	C					1.450	1.450
							T					.350	.350
							V					.360	.360
	C	do	12.00	3.000	.050	.450	C					1.700	1.700
							T					.450	.450
							V					.350	.350
50	A	New York	7.25	1.985	.035	.200	C					1.050	1.050
							T					.430	.430
							V					.270	.270
	B	do	10.00	2.685	.035	.200	C					1.600	1.600
							T					.500	.500
							V					.350	.350
	C	do	8.00	1.625	.025	.200	O					1.400	c 1.625
51	A	do	1.50	.383	.013	.050	S. T.					.320	c .383
	B	do	1.50	.383	.013	.050	S. T.					.320	c .383
	C	do	2.00	.463	.013	.050	S. T.					.400	c .463
	D	do	2.50	.513	.013	.050	S. T.					.450	c .513
52	A	do	7.50	2.299	.049	.300	C					1.200	1.200
							T					.450	.450
							V					.300	.300
	B	do	9.50	2.749	.049	.300	C					1.450	1.450
							T					.600	.600
							V					.350	.350
	C	do	7.50	1.695	.045	.300	O					1.350	c 1.695
	D	do	9.50	2.515	.045	.350	O					2.120	c 2.515
53	A	do	1.50	.275	.015	.030	S. T.					.230	c .275
	B	do	2.50	.415	.015	.050	S. T.					.350	c .415
	C	do	4.00	.585	.015	.070	S. T.					.500	c .585
54	A	do	12.00	3.553	.053	.850	C					1.750	1.750
							T					.450	.450
							V					.450	.450
	B	do	12.00	3.553	.053	.850	C					1.750	1.750
							T					.450	.450
							V					.450	.450
	C	do	13.50	3.953	.053	.850	C					2.000	2.000
							T					.550	.550
							V					.500	.500
	D	do	13.50	3.489	.039	.450	O					3.000	c 3.489
	E	do	14.00	3.249	.049	.450	O					2.750	c 3.249
55	A	Baltimore	10.00	2.800	.100	.400	C					1.300	1.300
							T					.500	.500
							V					.500	.500
	B	do	7.50	1.910	.100	.400	C					.800	.800
							T					.350	.350
							V					.260	.260
	C	do	10.00	2.000	.100	.400	O					1.500	c 2.000
	D	do	7.50	2.000	.100	.400	O					1.500	c 2.000
56	A	New York	7.00	2.035	.035	.250	C					1.100	1.100
							T					.350	.350
							V					.300	.300
	B	do	10.00	2.760	.035	.250	C					1.625	1.625
							T					.500	.500
							V					.350	.350

[a] Exclusive of examining, sponging and cutting. [b] Data not reported. [c] Includes cost of examining, sponging, and cutting.

TABLE 34.—DETAILS OF COST OF DIRECT LABOR OF UNITS, BY ESTABLISHMENTS AND STYLES—Continued.

Establishment No.	Styles.	Where made.	Gross price.	Cost of direct labor.									
				Total direct labor and contract work for unit.	Sponging and examining.	Cutting.	Coat, trousers, vest, overcoat, separate trousers.	Operating.	Handwork.	Pressing.	Other direct labor.	Contract work.	Total direct labor and contract work for each garment in unit.[a]
56	C	New York	$12.00	$3.175	$0.035	$0.250	C					$2.000	$2.000
							T					.520	.520
							V					.370	.370
							C					1.250	1.250
57	A	do	7.50	2.084	.034	.100	T					.400	.400
							V					.300	.300
	B	do	7.50	2.084	.034	.100	C					1.250	1.250
							T					.400	.400
							V					.300	.300
	C	do	8.50	2.529	.034	.100	C					1.625	1.625
							T					.450	.450
							V					.320	.320
	D	do	7.50	1.628	.028	.100	O					1.500	[b] 1.628
							C					.900	.900
59	A	Philadelphia	8.50	2.140	.060	.600	T					.350	.350
							V					.230	.230
	B	do	11.50	2.605	.060	.600	C					1.275	1.275
							T					.400	.400
							V					.270	.270
	C	do	13.50	3.260	.060	.600	C					1.700	1.700
							T					.550	.550
							V					.350	.350
	D	do	13.50	3.260	.060	.600	C					1.700	1.700
							T					.550	.550
							V					.350	.350
	E	do	12.50	2.400	.050	.600	O					1.750	[b] 2.400
61	A	New York	7.00	1.535	.035	.050	C					.800	.800
							T					.350	.350
							V					.300	.300
	B	do	9.00	2.135	.035	.100	C					1.250	1.250
							T					.400	.400
							V					.350	.350
	C	do	11.00	2.165	.105	.150	C					1.315	[b] 1.315
							T					.450	.450
							V					.400	.400
	D	do	13.00	3.055	.105	.250	C					1.750	1.750
							T					.500	.500
							V					.450	.450
62	A	do	7.00	1.733	.033	.080	C					1.050	1.050
							T					.350	.350
							V					.220	.220
	B	do	10.50	2.473	.033	.100	C					1.600	1.600
							T					.420	.420
							V					.320	.320
63	A	do	7.25	1.820	(c)	.200	O					1.620	[b] 1.820
	B	do	10.50	2.420	(c)	.300	O					2.120	[b] 2.420
	C	do	13.50	2.900	(c)	.400	O					2.500	[b] 2.900
	D	do	1.50	.350	(c)	.040	S. T.					.310	[b] .350
	E	do	2.25	.440	(c)	.050	S. T.					.390	[b] .440
64	A	do	7.00	1.965	(c)	.100	C					1.150	1.150
							T					.420	.420
							V					.295	.295
	B	do	9.00	2.240	(c)	.100	C					1.350	1.350
							T					.480	.480
							V					.310	.310
	C	do	10.00	2.535	(c)	.100	C					1.600	1.600
							T					.500	.500
							V					.335	.335
	D	do	11.00	2.535	(c)	.100	C					1.600	1.600
							T					.500	.500
							V					.335	.335
	E	do	7.50	1.600	(c)	.150	O					1.450	[b] 1.600
	F	do	9.00	1.800	(c)	.150	O					1.650	[b] 1.800

[a] Exclusive of sponging, examining, and cutting.

[b] Includes cost of examining, sponging, and cutting.

[c] Included in cost of cutting.

UNIT COST, INCLUDING DEPRECIATION AND INTEREST.

Table 35, which follows, shows the cost of production, selling price, and profit and loss of the units reported in Table 26, including the additional costs of depreciation and interest. The figures in the columns for total cost and net price are the same as the figures in Table 26. Whether to include the cost of depreciation and interest when considering the cost of production of commodities, is a mooted question. These items are shown here for comparative purposes only.

TABLE 35.—COST OF PRODUCTION, SELLING PRICE, AND PROFIT AND LOSS OF UNITS SHOWN IN TABLE 26, WITH ADDITIONAL COST OF DEPRECIATION AND INTEREST.

[The styles are designated by letters for convenience of reference to other tables. The same letter applied to the product of different establishments does not indicate identity or even similarity of style.]

THREE-PIECE SUITS.

Establishment No.	Styles.	Cost, excluding depreciation and interest.	Additional costs of—		Final cost of unit.	Net price of unit.	Final profit.	Final loss.
			Depreciation.	Interest.				
23	D	$19.818	$0.041	$0.097	$19.956	$23.205	$3.249	
15	F	21.368	.037	.163	21.568	23.250	1.682	
42	F	21.808	.017	.058	21.883	23.250	1.367	
23	C	18.048	.037	.086	18.171	20.475	2.304	
24	A	18.250	.034	.119	18.403	20.475	2.072	
39	F	16.483	.013	.014	16.510	20.460	3.950	
17	D	17.206	.021	.019	17.246	19.110	1.864	
9	D	18.594	.041	.240	18.875	18.428		$0.447
39	E	15.694	.012	.013	15.719	18.600	2.881	
42	E	17.185	.013	.047	17.245	18.600	1.355	
15	E	17.862	.031	.130	18.023	18.600	.577	
10	C	18.389	.042	.820	19.251	18.200		1.051
9	C	17.241	.038	.222	17.501	17.062		.439
39	D	14.687	.012	.012	14.711	17.205	2.494	
17	C	15.339	.019	.017	15.375	16.835	1.460	
9	B	16.071	.036	.219	16.317	16.152		.165
39	C	13.799	.011	.011	13.821	16.275	2.454	
15	D	15.038	.026	.114	15.178	16.275	1.097	
35	F	14.903	.030	.218	15.151	15.925	.774	
9	A	15.131	.034	.198	15.363	15.242		.121
39	B	13.192	.010	.011	13.213	15.345	2.132	
42	D	13.359	.010	.038	13.407	15.345	1.938	
37	D	14.999	.022	.058	15.079	15.345	.266	
41	E	15.128	.008	.058	15.194	15.345	.151	
34	D	15.309	.013	.288	15.610	15.345		.265
11	C	16.252	.032	.054	16.338	15.345		.993
35	E	13.807	.028	.206	14.041	15.015	.974	
23	B	14.100	.029	.063	14.192	15.015	.823	
36	D	14.405	.029	.197	14.631	15.015	.384	
36	B	14.704	.030	.197	14.931	15.015	.084	
10	B	15.351	.035	.676	16.062	15.015		1.047
34	C	14.590	.012	.280	14.882	14.880		.002
39	A	12.647	.010	.010	12.667	14.415	1.748	
15	C	13.477	.024	.101	13.602	14.415	.813	
38	D	14.196	.029	.147	14.372	14.415	.043	
37	C	14.367	.020	.055	14.442	14.415		.027
17	B	12.448	.015	.014	12.477	14.115	1.638	
35	D	12.805	.026	.193	13.024	14.105	1.081	
18	A	14.488	.050	.265	14.803	14.250		.553
42	C	11.854	.009	.035	11.898	13.950	2.052	
41	D	12.905	.007	.053	12.965	13.950	.985	
30	A	13.507	.019	.181	13.707	13.950	.243	
47	C	12.500	.013	.099	12.612	13.500	.888	
36	C	12.630	.026	.176	12.832	13.422	.590	
35	C	12.482	.026	.181	12.689	13.195	.506	
36	A	12.605	.026	.173	12.804	13.195	.391	
59	D	10.843	.012	.136	10.991	12.690	1.699	
59	C	11.016	.012	.136	11.164	12.690	1.526	
42	B	10.740	.008	.031	10.779	12.555	1.776	
22	B	11.301	.012	.055	11.368	12.555	1.187	
14	C	11.591	.018	.151	11.760	12.555	.795	
15	B	11.700	.021	.089	11.810	12.555	.745	
38	B	11.855	.024	.128	12.007	12.555	.548	
41	C	11.989	.006	.048	12.043	12.555	.512	
38	C	11.994	.025	.128	12.147	12.555	.408	

TABLE 35.—COST OF PRODUCTION, SELLING PRICE, AND PROFIT AND LOSS OF UNITS SHOWN IN TABLE 26, WITH ADDITIONAL COST OF DEPRECIATION AND INTEREST—Continued.

THREE-PIECE SUITS—Continued.

Establishment No.	Styles.	Cost, excluding depreciation and interest.	Additional costs of—		Final cost of unit.	Net price of unit.	Final profit.	Final loss.
			Depreciation.	Interest.				
30	B	$12.120	$0.017	$0.163	$12.300	$12.555	$0.255	
11	B	12.532	.024	.044	12.600	12.555		$0.045
54	C	12.842	.027	.108	12.977	12.555		.422
34	B	12.874	.011	.236	13.121	12.555		.566
35	B	11.727	.024	.168	11.919	12.285	.366	
23	A	12.626	.027	.052	12.705	12.285		.420
17	A	10.493	.013	.012	10.518	12.280	1.762	
47	B	11.377	.012	.089	11.478	12.150	.672	
61	D	12.569	.012	.074	12.655	12.610		.045
18	B	12.195	.042	.221	12.458	11.875		.583
25	B	10.925	.006	.006	10.937	11.625	.688	
37	B	11.101	.016	.044	11.161	11.625	.464	
41	B	11.149	.006	.044	11.199	11.625	.426	
13	D	11.289	.011	.169	11.469	11.625	.156	
44	B	11.470	.009	.115	11.594	11.625	.031	
35	A	10.823	.022	.156	11.001	11.375	.374	
10	A	12.546	.029	.512	13.087	11.375		1.712
47	A	10.498	.011	.082	10.591	11.250	.659	
56	C	11.440	.006	.106	11.552	11.760	.208	
14	B	10.943	.017	.134	11.094	11.160	.066	
54	A	11.177	.024	.096	11.297	11.160		.137
54	B	11.346	.024	.096	11.466	11.160		.306
49	C	11.680	.012	.177	11.869	11.160		.709
28	C	9.487	.007	.062	9.556	10.920	1.364	
59	B	9.688	.011	.116	9.815	10.810	.995	
38	A	11.197	.023	.109	11.329	10.695		.634
5	B	10.095	.009	.033	10.137	11.000	.863	
33	C	10.369	.011	.135	10.515	10.780	.265	
61	C	10.082	.010	.063	10.155	10.670	.515	
42	A	9.034	.007	.026	9.067	10.230	1.163	
64	D	9.657	.003	.010	9.670	10.010	.340	
62	B	9.034	.012	.096	9.142	9.765	.623	
37	A	9.070	.013	.037	9.120	9.765	.645	
25	A	9.202	.005	.005	9.212	9.765	.553	
22	A	9.502	.010	.043	9.555	9.765	.210	
15	A	9.535	.017	.068	9.620	9.765	.145	
34	A	10.737	.009	.184	10.930	9.765		1.165
27	A	10.710	.059	.075	10.844	9.555		1.289
45	D	8.761	.003	.077	8.841	9.800	.959	
43	B	8.870	.005	.021	8.896	9.800	.904	
50	B	9.169	.003	.067	9.239	9.800	.561	
55	A	9.210	.014	.116	9.340	9.800	.460	
56	B	9.647	.005	.088	9.740	9.800	.060	
18	C	9.466	.032	.177	9.675	9.500		.175
14	A	9.080	.014	.112	9.206	9.300	.094	
44	A	9.094	.007	.092	9.193	9.300	.107	
41	A	9.166	.005	.035	9.206	9.300	.094	
13	C	9.338	.009	.135	9.482	9.300		.182
11	A	9.379	.018	.033	9.430	9.300		.130
49	B	9.995	.010	.148	10.153	9.300		.853
30	C	10.067	.014	.121	10.202	9.300		.902
49	A	10.107	.010	.148	10.265	9.300		.965
28	B	8.512	.006	.052	8.570	9.100	.530	
26	B	8.879	.014	.060	8.953	9.100	.147	
64	C	8.994	.002	.009	9.005	9.100	.095	
47	D	8.721	.009	.066	8.796	9.000	.204	
3	A	10.525	.033	.006	10.564	9.900		.664
52	B	9.921	.021	.074	10.016	9.310		.706
45	C	7.884	.003	.070	7.957	8.820	.863	
33	B	8.500	.009	.110	8.619	8.820	.201	
61	B	8.674	.009	.052	8.735	8.730		.005
64	B	8.116	.002	.008	8.126	8.190	.064	
18	D	8.318	.028	.155	8.501	8.312		.189
57	C	9.785	.003	.137	9.925	8.330		1.595
59	A	7.252	.008	.085	7.345	7.990	.645	
13	B	7.851	.008	.115	7.974	7.905		.069
5	A	7.768	.007	.024	7.799	8.000	.201	
50	C	6.401	.002	.053	6.456	7.840	1.384	
45	A	7.201	.003	.062	7.266	7.840	.574	
45	B	7.217	.003	.062	7.282	7.840	.558	
33	A	7.672	.008	.098	7.778	7.840	.062	
55	B	6.505	.010	.087	6.602	7.350	.748	
52	A	7.360	.016	.058	7,434	7.350		.084

TABLE 35.—COST OF PRODUCTION, SELLING PRICE, AND PROFIT AND LOSS OF UNITS SHOWN IN TABLE 26, WITH ADDITIONAL COST OF DEPRECIATION AND INTEREST—Continued.

THREE-PIECE SUITS—Continued.

Establishment No.	Styles.	Cost, excluding depreciation and interest.	Additional costs of—		Final cost of unit.	Net price of unit.	Final profit.	Final loss.
			Depreciation.	Interest.				
57	B	$7.701	$0.003	$0.121	$7.825	$7.350	.....	$0.475
57	A	8.114	.003	.121	8.238	7.350	.....	.888
13	A	7.090	.007	.101	7.198	6.975	.....	.223
46	B	7.384	.004	.069	7.457	6.975	.....	.482
30	D	7.736	.011	.091	7.838	6.975	.....	.863
28	A	6.185	.004	.034	6.223	6.825	$0.602	.....
26	A	6.408	.010	.045	6.463	6.825	.362	.....
50	A	6.403	.002	.048	6.453	7.105	.652	.....
56	A	6.624	.003	.062	6.689	6.860	.171	.....
61	A	6.340	.006	.040	6.386	6.790	.404	.....
62	A	6.235	.009	.064	6.308	6.510	.202	.....
64	A	6.358	.002	.006	6.366	6.370	.004	.....
3	B	7.792	.025	.004	7.821	6.900	.....	.921
43	A	5.768	.003	.013	5.784	6.370	.586	.....
3	C	5.126	.016	.003	5.145	4.900	.....	.245
3	D	4.378	.014	.002	4.394	3.900	.....	.494
OVERCOATS.								
24	B	$18.509	$0.034	$0.111	$18.654	$19.110	$0.456	.....
9	F	16.668	.037	.219	16.924	16.835	.....	$0.089
17	F	14.787	.018	.016	14.821	16.380	1.559	.....
15	I	14.515	.025	.114	14.654	16.275	1.621	.....
34	F	14.073	.011	.288	14.372	15.345	.973	.....
23	F	12.877	.027	.063	12.967	15.015	2.048	.....
10	E	15.453	.035	.655	16.143	14.560	.....	1.583
15	H	12.913	.022	.101	13.036	14.415	1.379	.....
37	E	15.737	.022	.053	15.812	13.950	.....	1.862
36	E	14.348	.030	.179	14.557	13.650	.....	.907
9	E	13.642	.030	.172	13.844	13.195	.....	.649
54	E	12.385	.026	.112	12.523	13.020	.497	.....
17	E	10.879	.013	.013	10.905	12.740	1.835	.....
15	G	9.630	.016	.089	9.735	12.555	2.820	.....
11	D	11.661	.022	.044	11.727	12.555	.828	.....
63	C	11.980	.011	.018	12.009	12.555	.546	.....
30	E	12.767	.018	.163	12.948	12.555	.....	.393
54	D	13.197	.028	.108	13.333	12.555	.....	.778
23	E	11.344	.024	.052	11.420	12.285	.865	.....
47	E	11.394	.012	.089	11.495	12.150	.655	.....
47	F	11.524	.012	.089	11.625	12.150	.525	.....
18	E	11.425	.039	.221	11.685	11.875	.190	.....
59	E	9.694	.011	.126	9.831	11.750	1.919	.....
25	D	10.483	.006	.006	10.495	11.625	1.130	.....
34	E	11.452	.009	.219	11.680	11.625	.....	.055
37	F	11.943	.018	.044	12.005	11.625	.....	.380
10	D	11.674	.027	.512	12.213	11.375	.....	.838
5	D	8.656	.007	.033	8.696	11.000	2.304	.....
25	C	8.737	.005	.005	8.747	9.765	1.018	.....
63	B	10.001	.009	.014	10.024	9.765	.....	.259
27	C	10.168	.055	.075	10.298	9.555	.....	.743
27	D	10.168	.055	.075	10.298	9.555	.....	.743
55	C	7.673	.011	.116	7.800	9.800	2.000	.....
18	F	9.537	.033	.177	9.747	9.500	.....	.247
13	F	9.516	.009	.135	9.660	9.300	.....	.360
30	F	10.004	.014	.121	10.139	9.300	.....	.839
52	D	8.547	.018	.074	8.639	9.310	.671	.....
28	D	7.485	.005	.049	7.539	8.645	1.106	.....
64	F	7.553	.002	.008	7.563	8.190	.627	.....
5	C	6.255	.005	.024	6.284	8.000	1.716	.....
45	E	6.797	.002	.062	6.861	7.840	.979	.....
45	F	6.439	.002	.058	6.519	7.350	.831	.....
55	D	6.559	.010	.087	6.656	7.350	.694	.....
57	D	7.704	.003	.121	7.828	7.350	.....	.478
52	C	7.725	.017	.058	7.800	7.350	.....	.450
12	E	7.128	.007	.101	7.236	6.975	.....	.261
64	E	5.577	.002	.007	5.586	6.825	1.239	.....
63	A	6.511	.006	.009	6.526	6.742	.216	.....

TABLE 35.—COST OF PRODUCTION, SELLING PRICE, AND PROFIT AND LOSS OF UNITS SHLWN IN TABLE 26, WITH ADDITIONAL COST OF DEPRECIATION AND INTEREST—Continued.

SEPARATE TROUSERS.

Establishment No.	Styles.	Cost, excluding depreciation and interest.	Additional costs of—		Final cost of unit.	Net price of unit.	Final profit.	Final loss.
			Depreciation.	Interest.				
4	E	$4.287	$0.003	$0.006	$4.296	$4.500	$0.204	.....
53	C	3.192	.002	.023	3.217	3.780	.563	.....
4	D	3.710	.003	.005	3.718	3.750	.032	.....
4	C	3.395	.002	.005	3.402	3.500	.098	.....
2	C	2.889	.004	.009	2.902	3.185	.283	.....
4	B	2.853	.002	.004	2.859	2.950	.091	.....
2	B	2.217	.003	.007	2.227	2.502	.275	.....
53	B	1.966	.001	.014	1.981	2.325	.344	.....
51	D	2.291	.002	.....	2.293	2.325	.032	.....
46	A	2.303	.001	.023	2.327	2.325	.....	$0.002
63	E	1.876	.002	.003	1.881	2.092	.211	.....
2	A	1.851	.002	.006	1.859	2.047	.188	.....
4	A	1.960	.001	.003	1.964	2.000	.036	.....
51	C	1.743	.001	.....	1.744	1.860	.116	.....
53	A	1.259	.001	.009	1.269	1.395	.126	.....
51	A	1.338	.001	.....	1.339	1.395	.056	.....
51	B	1.338	.001	.....	1.339	1.395	.056	.....
63	D	1.438	.001	.002	1.441	1.395	.....	.046

Table 36, which follows, compiled from Tables 26 and 35, is intended to show the number of units sold at a loss excluding the cost of depreciation and interest, compared with the same units including these costs.

TABLE 36.—NUMBER OF UNITS REPORTED SOLD AT A LOSS WITH COST OF DEPRECIATION AND INTEREST EXCLUDED, COMPARED WITH THE NUMBER OF UNITS SOLD AT A LOSS INCLUDING DEPRECIATION AND INTEREST.

Kinds.	Number of units reported.	Number sold at a loss, depreciation and interest—		Kinds.	Number of units reported.	Number sold at a loss, depreciation and interest—	
		Excluded.	Included.			Excluded.	Included.
Three-piece suits:				Separate trousers:			
Under $8	18	9	10	Under $2.75	11	1	2
$8 to $15	83	20	24	$2.75 and over	7	.....	.....
$15 and over	43	6	8				
				Total	18	1	2
Total	144	35	42	Grand total	210	53	63
Overcoats:							
Under $8	7	3	4				
$8 to $15	31	11	12				
$15 and over	10	3	3				
Total	48	17	19				

COST AFFECTED BY INCREASED PRICES OF WOOL.

As shown by preceding tables, the cost of materials averages more than half the total cost of production of clothing. The cost of the fabric or outer cloth is several times as large as the cost of the other materials. The cost of the fabric made of wool or partly of wool depends on the cost of wool. During the years 1913, 1914, and

1915 there were great variations in the prices of the various kinds of wool, as shown by the following table:

TABLE 37.—WHOLESALE PRICES OF WOOL AND MOHAIR IN UNITED STATES MARKETS, JANUARY, 1913, TO DECEMBER, 1915.

[Prices at Boston furnished by the Boston Commercial Bulletin.]

Date.	Wool.								Mohair.	
		Unwashed.			Scoured basis.				Choice.	
	Washed Ohio, XX.	Michigan, fine.	Ohio, fine.	Kentucky and Indiana, ¼ blood.	Territorial fine medium.[a]		B superpulled.	Australian 64's combing.	Combing.	Carding.
					Staple.	Clothing.				
	Per pound.									
1913.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
January 3	32	23	24	32	65	59	53	82	36	25
February 7	32	23	24	32	63	58	54	82	36	25
March 7	29	22	24	30	58	57	54	82	36	25
April 4	29	22	23½	29	59	55	47	82	37	25
May 2	27	20	21	27	56	53	45	82	38	26
June 6	27	20	21	25	55	50	45	82	38	26
July 3	27	20	21	25	55	50	45	82	38	26
July 11	28	20	21	26	55	50	45	82	38	26
July 18	29	20	21	26	55	50	45	82	38	26
July 25	29	20	21	26	55	50	45	82	38	26
August 1	29	20	21	26	55	50	45	82	38	26
August 8	29	20	21	26	54	50	45	82	38	26
August 15	27	20	21	26	54	50	45	82	38	26
August 22	26	20	21	26	54	50	45	82	38	26
August 29	25	20	21	25	54	50	45	82	38	26
September 5	25	20	21	24½	53	50	43	82	38	26
September 12	25	20	21	24½	53	50	43	82	38	26
September 19	25	20	21	24	53	50	42	82	38	26
September 26	25	20	21	24	53	50	42	82	38	26
October 3	26	20	21	24	53	50	42	82	38	26
October 10	26	20	21	24	53	50	42	82	38	26
October 17	26	20	21	24	54	52	40	82	38	26
October 24	25½	20	21	24	52	48	40	82	38	26
October 31	25½	20	21	24	52	48	40	82	38	26
November 7	25½	20	21	24	52	48	39	82	38	26
November 14	25½	20	21	23½	52	48	38	82	38	26
November 21	25½	20	21	23½	52	48	38	82	38	26
November 28	26½	20	21	23½	51	48	38	82	38	26
December 5	25½	20	21	23½	51	48	38	82	37	28
December 12	25½	20	21	23½	51	48	38	61	37	28
December 19	25½	20	21	23½	51	48	38	63	37	28
December 26[b]	25½	20	21	23½	51	48	38	62	37	28
1914.										
January 2	25½	20	21	23½	51	48	38	62	37	28
January 9	25½	20	21	23½	52	48	38	62	36	28
January 16	25½	20	21	23½	52	48	40	62	36	28
January 23	26	20	21½	23½	52	48	42	61	37	28
January 30	26	20	21½	23½	52	48	42	61	37	28
February 6	26½	20	22	23½	53	50	42	62	37	28
February 13	26½	21	22	23½	53	51	42	61	36	33
February 20	26½	21	22	23½	54	51	42	62	36	33
February 27	26½	21	22	23½	54	52	42	62	36	33
March 6	26½	21	22	23½	54	52	42	62	36	33
March 13	27	21	22	23½	54	52	42	62	36	33
March 20	27	21	22	23½	54	52	42	62	36	33
March 27	27	21	22	23½	54	53	42	65	36	33
April 3	27	21	22	23½	55	53	43	65	36	33
April 10	27	21	22	23½	55	53	43	65	36	33
April 17	27	21	22	25	55	53	43	65	36	33
April 24	27	21	22	25	55	53	43	65	36	33
May 1	27	21	22	25	55	53	43	65	36	33
May 8	27	21	22	26	56	53	43	65	36	33
May 15	27	22	23	26	58	55	43	67	36	33
May 22	27	22	23	27	58	55	43	67	36	33

[a] Territorial wools embrace the Dakotas, Idaho, Arizona, Nevada, Washington, Kansas, and Nebraska.
[b] Prices of wool for Dec. 24.

TABLE 37.—WHOLESALE PRICES OF WOOL AND MOHAIR IN UNITED STATES MARKETS, JANUARY, 1913, TO DECEMBER, 1915—Continued.

Date.	Wool.								Mohair.	
		Unwashed.			Scoured basis.				Choice.	
	Washed Ohio, XX.	Michigan, fine.	Ohio, fine.	Kentucky and Indiana, ¼ blood.	Territorial fine medium.		B superpulled.	Australian 64's combing.	Combing.	Carding.
					Staple.	Clothing.				
	Per pound.									
1914.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
May 29	27	22	23	27	59	55	43	67	36	33
June 5	28	22	25	27	59	55	43	67	36	33
June 12	28	23	25	27	59	55	43	67	36	33
June 19	28	23	25	27	59	55	43	67	36	33
June 26	28	23	25	27	59	55	43	67	36	33
July 3	28	23	25	27	60	57	43	67	36	33
July 10	29	23	25	27	60	57	43	68	36	33
July 17	29	23	25	27	60	57	43	71	36	33
July 24	29	23	25	27	60	57	43	71	36	33
July 31	29	23	25	27	60	57	45	71	36	33
August 7	29	23	25	27	60	57	46	71	36	33
August 14	29	23	25	27	60	57	46	71	36	33
August 21	29	23	25	27	60	57	46	71	36	33
August 28	31	23	25	27	60	57	46	71	36	33
September 4	31	23	25	27	60	57	46	71	36	33
September 11	31	23	25	27	60	57	46	68	36	33
September 18	31	23	25	27	60	57	45	65	36	33
September 25	31	23	25	27	60	57	45	63	36	33
October 2	30	23	25	27	60	57	45	63	36	33
October 9	28	23	25	27	60	57	45	63	36	33
October 16	28	23	24	27	60	57	48	63	36	33
October 23	28	23	24	27	60	57	48	63	36	33
October 30	27	23	24	27	60	57	48	63	36	33
November 6	27	22	24	27	60	57	49	63	36	33
November 13	29	22	24	27	60	57	50	65	36	33
November 20	29	23	24	28	62	57	51	65	36	33
November 27	29	23	24	28	62	57	51	65	36	33
December 4	29	23	24	28	62	57	51	65	36	33
December 11	29	23	24	28	60	57	51	65	36	33
December 18	29	23	24	29	60	57	56	65	36	33
December 25	29	23	24	29	60	57	56	65	36	33
1915.										
January 1	29	23	24	29	60	57	59	65	36	33
January 8	30	23	27	30	62	57	60	65	36	33
January 15	30	23	24	31	62	57	60	66	36	33
January 22	30	23	25	32	62	57	61	65	36	33
January 29	30	23	25	33	63	59	63	66	36	33
February 5	30	23	26	34	65	62	64	68	36	33
February 12	33	26	29	36	67	65	62	68	36	33
February 19	33	26	29	36	70	68	62	68	36	33
February 26	33	26	29	37	70	68	72	68	36	33
March 5	33	26	29	38	70	68	71	68	36	33
March 12	33	26	29	38	70	68	71	72	36	33
March 19	33	26	29	38	70	68	68	72	36	33
March 26	33	26	29	38	70	68	68	72	36	33
April 2	33	26	29	38	70	68	67	72	36	33
April 9	32	27	27	37	70	68	65	72	36	33
April 16	32	27	27	37	68	68	63	72	36	33
April 23	32	27	27	37	68	68	62	72	36	33
April 30	32	27	27	37	66	68	60	72	36	33
May 7	32	23	27	37	66	68	60	68	36	33
May 13	32	23	27	37	67	65	60	68	36	33
May 20	32	23	27	37	67	65	60	70	36	33
May 27	32	23	27	37	67	65	63	70	36	33
June 3	32	23	27	37	67	65	63	70	36	33
June 10	32	23	27	37	67	65	65	70	36	33
June 17	32	23	27	38	67	65	65	70	36	33
June 24	32	23	27	39	67	65	65	72	36	33
July 1	32	23	27	39	68	65	65	72	36	33
July 8	32	23	27	39½	68	65	65	72	36	33
July 15	32	23	27	39½	68	65	65	72	38	35
July 23	32	23	27	39½	68	65	65	72	40	37
July 29	32	23	27½	39½	68	65	65	72	38	35
August 5	32	23	27½	39½	68	65	65	72	38	35

TABLE 37.—WHOLESALE PRICES OF WOOL AND MOHAIR IN UNITED STATES MARKETS, JANUARY, 1913, TO DECEMBER, 1915—Continued.

Date.	Wool.								Mohair.	
		Unwashed.			Scoured basis.				Choice.	
	Washed Ohio, XX.	Michigan, fine.	Ohio, fine.	Kentucky and Indiana, ¼ blood.	Territorial fine medium.		B superpulled.	Australian 64's combing.	Combing.	Carding.
					Staple.	Clothing.				
	Per pound.									
1915.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.	Cents.
August 13	32	23	27½	39½	70	65	65	72	38	35
August 20	32	24	27½	39½	70	65	65	72	38	35
August 27	32	24	27½	39½	70	65	65	72	38	35
September 3	32	24	27½	39½	70	65	65	72	38	35
September 10	32	24	27½	39½	70	65	63	72	38	35
September 17	32	24	27½	38½	70	65	63	72	38	35
September 24	32	24	27½	38	70	65	63	72	38	35
October 1	32	24	27	37	70	65	63	72	38	35
October 8	32	24	27	37	70	65	63	72	38	35
October 15	32	24	27	37	70	65	63	72	38	35
October 22	32	24	27	37	70	65	60	72	38	35
October 29	32	24	27	37	70	65	60	72	38	35
November 5	32	24	27	37	70	65	60	72	38	35
November 12	32	24	27	38	70	65	63	72	38	35
November 19	32	24	27	38	70	65	64	75	38	35
November 26	32	24	27	38	70	65	64	75	38	35
December 3	31½	25	27	38	71	68	64	75	38	35
December 10	32½	25	27	38	72	68	64	75	38	35
December 17	32½	25	27	38	72	68	64	75	38	35
December 24	32½	25	27	38	72	68	64	75	38	35

During the year 1913 there was a gradual decline in the prices of most kinds of wool. During the years 1914 and 1915 prices have increased. The prices of woolen cloths have increased correspondingly, and as wages have not decreased the cost of production of clothing has increased since 1913.

CHAPTER IV.

MANUFACTURING CONDITIONS.

PRINCIPAL MANUFACTURING CENTERS.

The principal centers for manufacturing clothing at the present time are New York, Chicago, Baltimore, Philadelphia, and Rochester. To a considerable extent clothing is also manufactured in Cincinnati, Boston, St. Louis, Milwaukee, Cleveland, Detroit, Louisville, Syracuse, and San Francisco. New York employs more male help than the other principal centers, which employ female help to a large degree. The females employed in New York and Philadelphia are mostly Italians. New York, though it manufactures some very fine clothing, is the largest center for cheap clothing. Most of the children's clothing is made in New York. Baltimore and Philadelphia are the large centers for medium-grade clothing. Chicago and Rochester, though they manufacture medium clothing also, are the principal cities for high-grade clothing.

In New York and Philadelphia most of the firms are of medium size or small, the industry in New York particularly being in the hands of numerous small manufacturers. In Chicago, Rochester, and Baltimore the bulk of the manufacturing is done by a few large houses.

ADVANTAGES OF THE DIFFERENT CENTERS AS TO LABOR.

None of the principal manufacturing centers enjoys a decided advantage as to labor. Immigration no longer plays the important rôle in the clothing trade that it formerly did. Years ago New York and the other Atlantic coast cities had a decided advantage. They were the ports of arrival of the foreigner, who usually landed in this country impoverished, and manufacturers in these cities had no difficulty in the selection of help. This advantage, however, has to a great extent disappeared.

Foreigners are clannish, and their family and racial ties are closely bound; they live together and work together. The foreigner to-day, if he has money, immediately goes to his friends in whatever cities they happen to be located, or if he is brought over by relatives, will naturally be brought to the city where they have settled. So we find that the Jewish and Italian unskilled laborers whose friends are employed in clothing factories in New York or Baltimore or Philadelphia, go to these places. The Pole or Bohemian who has friends in Chicago will go there, the German to Rochester, etc. It is due to this fact that the centers outside of New York have sufficient help of the kind they require for their particular product.

A great change in the method of manufacture has also wiped out the advantage that the Atlantic coast cities derived from immigration. Formerly, when few operations were performed on a coat, a skilled tailor was absolutely necessary. Immigration furnished

these cities with such skilled help. To-day, however, there is so great a subdivision of labor that the experienced tailor is no longer essential. In the cost of living, the centers outside of New York and Chicago, especially manufacturing centers such as Baltimore, Cleveland, Cincinnati, etc., have a decided advantage.

ADVANTAGES OF THE PRINCIPAL CENTERS AS TO MARKET.

New York appears to have a decided advantage as to market. It is nearest to the New England woolen mills that supply most of the material for the manufacture of clothing. Every important woolen mill has sales and distributing headquarters in New York in which a complete sample line of fabrics is always to be seen and from which goods are delivered, without charge, to the New York manufacturers. Though these mills have salesmen visit manufacturers in every large clothing center several times a year, these salesmen do not carry complete lines nor do they always come at the most opportune times. As novelties are constantly being introduced, manufacturers are compelled to visit New York if they are to keep in touch with the market.

Retailers or their buyers, instead of visiting the different localities for the various classes of merchandise they require, prefer to go to New York, where in one visit they can see the complete range from the cheapest to the best, this method no doubt aiding judicious buying. Buyers also like to go to New York because of the many pleasure attractions afforded, which are a very important consideration. In previous years distant retailers rarely visited the big markets. At present it is the exceptional retailer who does not visit the New York market several times a year. Realizing these facts, most of the large and medium-sized manufacturers of other clothing centers have established selling and purchasing offices in New York. The factories in New York have in this respect a decided advantage, for they save the large expense incurred in maintaining such separate offices and showrooms. The fact that the salesmen of all manufacturers visit every community does not alter the necessity of maintaining offices in New York.

Philadelphia and Cincinnati manufacturers complain that buyers will not stop off en route to New York. A Cincinnati manufacturer stated that the merchants of that city had organized and offered to pay the railroad fare both ways and other expenses while in the city, to buyers who would purchase a certain amount of goods. Even this offer was not sufficient to induce buyers to stop off at Cincinnati. Chicago, because of its size, its energetic methods of advertising, and the fact that in many respects it rivals New York as an attraction center, suffers less than the other cities in comparison with New York. Chicago is centrally located and has great shipping and distributing facilities. In spite of the fact, however, that retailers usually pay the freight and express charges, and thus in many instances goods purchased in Chicago would be cheaper than if purchased in New York, this item rarely enters into the calculations of the buyer. He continues to go to New York to examine and purchase his goods, though the goods may not be made by a New York manufacturer.

LARGE AND SMALL FACTORIES.

Census statistics reproduced in the section on "The growth of the industry" show that the establishments engaged in the manufacture of clothing are becoming larger. The value of the products of such establishments reported averaged $48,301 in 1899, $78,996 in 1904, and $86,977 in 1909 per establishment.

A number of advantages are enjoyed by the larger establishments. The large manufacturer can usually buy materials on better terms than the small manufacturer, and the mills that furnish cloth usually make more prompt deliveries to him than to the small manufacturer. The large manufacturer, whose trade extends all over the United States and in regions where climatic conditions are different, can operate his factory on much more nearly a full-time basis than the small manufacturer, and on that account he is better able to hold his working force together throughout the year.

The large manufacturer can effect economies by the division and subdivision of the work in his factory. By distributing the general expense over a large product the cost per unit of production can be reduced, but it does not always follow that this will be the result. Indeed, great care and good judgment are required to handle a large organization so as to produce goods more cheaply; for if the organization is incomplete or too complicated it may be very inefficient.

One advantage secured by large manufacturers when practically all of their garments are made inside is that they are enabled to produce goods of uniform quality and to produce, season by season, garments that exhibit distinctive characteristics. Such a result could not be obtained where the garments are made by various contractors, especially when they are not produced under the supervision of the manufacturing establishment.

Another advantage secured by a large establishment that has some or all of its work done by contract is that on account of its size it can furnish enough work to a contractor to make it an object with him to favor the large manufacturer over the smaller one in the way of lower prices and earlier delivery. The large manufacturer is thus enabled to make earlier deliveries to his customers, which is always important, because a large number of the cancellations of a firm are due to slow deliveries. Moreover, when deliveries are prompt customers are not so apt to ask for extra discounts, and bills are paid earlier and interest charges reduced. Where the large manufacturer does all or the greater part of his manufacturing inside, his advantage in the particular just mentioned becomes still greater.

Salesmen are a big factor in building up a business, and the prestige of the larger establishments enables them to attract the best class of salesmen. Moreover, the name of a large manufacturer extensively advertised is an asset to the retail merchant, who prefers to buy goods from a large, widely known house, because the brand of the house helps to sell the goods.

The medium-sized manufacturer, unless he produces some special line which is in demand and which his factory is generally known to produce, has keen competition from both the large manufacturers and the small manufacturers. He must have an organization similar to the organization of the large establishments and nearly as complete. His overhead cost can not be distributed over so large

a product as that of the large establishments, and the percentage of overhead cost is usually very much larger on this account. To a great extent firms of medium size manufacture through contractors, and hence can not produce the same quality of garments as can be made under the direct supervision of large manufacturers inside the factory.

Almost always medium-sized establishments have a number of contractors. This results in a lack of uniformity in the goods sold by the establishment, which is a fault that manufacturers try to avoid and that buyers are quick to notice. Often orders are received with the specification that the garments must be made up in a certain manner and must have a certain appearance. It is hard for the medium-sized establishment always to produce garments of specified qualities from season to season, or even during one season, for they are made up by a number of contractors who may work for a particular manufacturer only occasionally and hence have not learned what his customers demand, or may not have had the opportunity to teach their tailors how to produce garments for particular customers. An organization requires a long period of training before it is able to produce just what the manufacturer or his customers desire.

The very small manufacturer, as a rule, makes low-grade garments; the medium-sized manufacturer, as a rule, makes garments that are of better quality and higher cost, but usually a considerable part of his product is in competition with the output of the smaller manufacturer.

The opinion widely prevails in the industry that the larger houses are becoming larger, that the medium-sized houses are not growing and that many of them have gone out of business in the last fifteen years, and that the very small houses are becoming much more numerous and are usually very successful.

As a rule, the small manufacturer operates on a different basis as regards all the costs entering into his product. He is usually found in a district where rents are low. He engages a cheap class of labor. In many districts where the factories are small the regulatory laws are not enforced, and the employees work under conditions that would not escape the attention of the factory inspectors in more centrally located districts. The small manufacturer has a minimum of overhead cost. His office force is small, consisting often of only one or two persons. For many of these small factories the proprietor is the only salesman. Their trade is almost entirely in the locality of the factory and the cost of selling is very low.

Necessarily each manufacturer operating in this manner can not do a very large business, but when they largely outnumber the others in a clothing center, as they do in some of the larger cities, it can readily be seen that they might seriously affect the business of manufacturers who have a larger production.

As shown by tables in the chapter on "Cost and profit by establishments," the percentages of manufacturing profit earned during their last business years by establishments with net sales of less than $500,000 was 4.74; by establishments with net sales of $500,000 to $1,000,000, 4.11; by establishments with net sales of $1,000,000 to $2,000,000, 4.67; by establishments with net sales of over $2,000,000, 6.73.

CHANGES IN MANUFACTURING AND TRADE CONDITIONS.

The demand for cheap and medium-priced clothing is increasing. Probably the biggest demand is for medium-priced goods, and a smaller demand for very cheap and very fine clothes. More fine clothes are sold than formerly, not because those who have been wearing cheap and medium grades demand finer clothes, but because every year more people who formerly wore custom clothes turn to the ready-made. This is largely due to the tireless energy of some clothing manufacturers in working out their patterns and styles to fit individuals who formerly could obtain well-fitting suits only from custom tailors.

PROPORTIONATE VALUE OF CLOTH.

Most of the clothing houses and retailers that advertise have in the past laid stress only on the style of the suit, the cut, the shade of cloth, etc. In manufacturing the greatest care has been taken to select novelty fabrics, buttons, etc., but practically no attention has been given to the intrinsic value of the suit, namely, the quality of the cloth. When purchasing woolens, manufacturers have been concerned mainly with the effectiveness of the design as a quick seller. During this investigation many manufacturers, when asked the percentage of wool in the cloth of their leading numbers, pleaded ignorance. They knew nothing of the kind of wool or the dyes used in the fabrics. Some of the large houses that advertise and sell under their own brands go exhaustively into the merits of the materials they use, but the great majority of manufacturers are still purchasing materials for their attractiveness rather than for their quality. The manufacturing cost, due to ever-changing styles and fabrics, has increased to such an extent that poor-wearing, cheap fabrics are generally used, even in high-priced suits.

The two following paragraphs, quoted from the Daily Trade Record of June 2, 1915, give the opinion of well-versed men of the trade on this question of fabrics:

> That gross ignorance of the component parts of fabrics exists to-day in the clothing industry of this country, which can be eliminated by the manufacturers if they would but subject to a thorough test all piece goods purchased by them, and impart to the retailer the accurate percentages of wool and cotton in fabrics, is the opinion of Porter M. Farrell, buyer of clothing for the National Cloak and Suit Co., and who perhaps buys as much clothing as any other individual in the country.
>
> Mr. David[a] contends the consumer is not getting the value in merchandise that he is entitled to, with special reference to fabric value. He said that the consumer has no complaint to make with regard to the cut, make, and trim of a garment, but there is a distinct lack of value in the piece-goods end, which he believes is the most important end, and for the betterment of the industry should receive the attention of the manufacturers.

The following is a concrete example of the tendency of many manufacturers. During this investigation a New York manufacturer who has a reputation for making good clothing submitted a coat to the agent of this Bureau as being one of four or five styles that represented his business. The garment was an overcoat selling to the retailer for $13.50 gross; the price to the consumer was about $18. The coat was made of 2½ yards of cashmere, at $0.96 per yard; for body and sleeve linings 3 yards of 30-inch silk, at $1.50

[a] John David, a large retail clothier of New York City.

per yard were used. The fabric upon which depends the durability of the coat cost $2.40, and the lining, which in this case was probably used to enhance the appearance of the coat, cost $4.50.

Cloth is purchased from two to nine months in advance of its being used, the usual period being about six months. Nevertheless the manufacturer often does not receive his goods in time to cut them up to fill orders. The mill will make up a sample piece and wait until different manufacturers have ordered enough of that cloth to make its manufacture profitable. Or, if a particular style of cloth is "running big," the mill, being unable to turn out sufficient to fill all its orders on that cloth, will distribute a small portion of his order to each manufacturer.

Mr. H. D. Kohn, former president of the National Association of Clothiers, in an interview with an agent of the Bureau, said:

> Manufacturing conditions would be improved if mills would deliver materials in accordance with arrangements made, if quantities of goods could be made in advance, if not so many styles or models of clothing were made, and if orders could be depended on as bona fide. Many economies in manufacturing would necessarily follow, stocks would be disposed of to better advantage, and there would be less left-over material.

Trimmings, such as linings, buttons, haircloth, and canvas, are ordered from one to six months in advance, but frequently are purchased as needed.

The spring-season market begins November 15 and closes May 15. Most cloths for that season are bought in June, July, and August. They are cut into swatches and taken out by salesmen, who solicit orders in September, October, and November. The manufacture begins in the fall and continues through the season. Deliveries are generally made after January 1, continuing until spring, and the reorders are received during the spring.

For fall seasons the cloths are bought in December, January, and February, and salesmen go out in March, April, and May. Manufacturing extends from late in the spring until fall and the bulk of delivery is from September on. Reorders are received during the winter.

In selling clothing long credits are given, so that a manufacturer does not receive payment for his goods until six to eight months after he pays for his materials and four to six months after he pays for the labor.

In recent years the clothing trade has experienced constant changes in materials, patterns, and styles. The broad athletic shoulder and peg trousers are no longer visible. Clothes to-day must be of the natural, form-fitting variety. There is everywhere a marked tendency to wear lighter-weight materials throughout the year. In 1900 the standard winter overcoat was made of cloth weighing 30 to 33 ounces to the yard, the winter suits of materials weighing 18 to 22 ounces per yard, and the spring suit of fabrics weighing about 15 ounces per yard. At the present time the weight of materials for winter overcoats is 24 to 28 ounces per yard, for winter suits 13 to 16 ounces per yard, and for spring suits 10 to 12 ounces per yard. The reasons given for these changes in the weight of materials are that the homes and places of business are better heated and ventilated than formerly and that the general public has come to feel that very heavy-weight apparel of any kind does not necessarily make for better health. The marked changes in materials have taken place

not only in the weight of the material but in the pattern, color, and kind of the material as well. Blacks and blues as staple suits are no longer in demand. Everything is made in fancy novelty designs, usually of the lighter colors.

IMPORTANCE OF STYLES.

Style is at present of paramount importance. The consumer is no longer satisfied with a suit. He wants lines, cut, etc. The public has been taught to demand novelties until style is the only consideration in purchasing a garment. The public has been educated to style by the national advertising campaigns of large manufacturers and tailors-to-the-trade, and the trimmed windows and show cases of enterprising retailers. So important has become the question of style that manufacturers, in their eagerness to show something that will attract the purchaser, are creating new styles constantly. Special styles must be worn at the races, at the baseball game, for golfing, etc.

Where formerly a complete set of sizes of one model was cut from a single pattern of cloth, numerous styles now are cut from the same pattern material. One very old firm in New York engaged in manufacturing fine clothes said that formerly they had two styles of overcoats and one style of sack coat, the changes from one season to another consisting of shortening or lengthening the coat, etc. For the present season this firm has 19 styles of overcoats and 15 sack coats. This sample line is small; many of the larger houses show hundreds of styles for a single season, the hundreds shown being the selection out of several hundred others that were made up and discarded. These changes in materials and styles greatly increase not only the hazard of the business but the cost as well.

Palm Beach or tropical suits have recently come into much prominence. Originally they were worn in continental United States at seaside and other summer resorts, as a fad, but their practicability soon became impressed upon the public. At the present time, in the South, the Palm Beach suit takes the place of other kinds of summer clothing and large numbers of people in all sections of the country have adopted it, as the extra suit, if not for regular wear. The demand for Palm Beach suits has been growing to such an extent that to-day they are an important factor in the clothing trade. They have made great inroads into the regular summer-clothing business, so that many manufacturers have been compelled to add them to their other products to keep their factories running. Palm Beach suits are not absolutely essential, as there are other forms of summer clothing, but they wear well and wash well, and as long as they remain reasonable in price they will continue to be a factor in the summer-clothing business.

MANUFACTURING FOR ORDERS.

As the demand for clothing is seasonal, the great bulk of clothing is manufactured for orders taken three to five months in advance. A warm winter, cool spring, unseasonable weather at the opening of a new season, and doubt as what styles and cloths will be in vogue are all important factors in the trade.

A little stock is usually manufactured after the first orders are taken and the manufacturer has some idea what styles and fabrics are going to be popular. This is true only to a limited extent, for generally a buyer will not purchase a sample just as it is shown. He may select the style shown but with different lining and buttons, or the same style in a different fabric, etc. The manufacturing of stock on a large scale is generally, under present conditions, financial suicide. The tendency toward small orders is due to the retailer going to various houses recognized as being specialists in certain grades of goods. The changes in style and fabrics do not permit the retailer to hazard purchasing goods for a long time ahead. There is also a marked tendency on the part of the manufacturer not to overload the retailer as he formerly did, because he has at last recognized that such overloading is in the long run disastrous to himself as well as to the retailer.

Everywhere except in New York, where there is more and more contracting, the tendency is toward larger inside factories. There is no question as to the advantage of the large inside shop over the small inside shop. The relative advantages of inside and contract shops are discussed in the sections on "Contract Shop" and "Home Work."

MAIL-ORDER HOUSES AND TAILORS-TO-THE-TRADE.

Mail-order houses, which purchase their goods from the manufacturer, have not disadvantageously affected the wholesale trade. The tailor-to-the-trade houses have, however, very seriously affected the wholesale trade. The tailor-to-the-trade house is a combination of the wholesale manufacturer and the custom tailor, wholesaler in that he manufactures in large quantities, custom tailor in that he gives the purchaser a suit cut to his measure. The tailor-to-the-trade house is a national advertiser, and his agents are the small merchants in every hamlet and town. This agent is given a complete line of fabric swatches, together with photographs of the various styles of garments. He carries no stock. The prospective customer reads the advertisement of the tailor-to-the-trade house in a magazine, visits the advertiser's agent in his town, selects any style and fabric and has his measure taken on a regularly provided form. The purchaser receives a made-to-order suit in the fabric and style he desires, which is not always possible in purchasing a ready-made suit. The retailer makes a profit without the risk of having any stock left over at the end of the year. The tailor-to-the-trade, combining these individual orders, does a wholesale business with its resulting economies.

The tailoring-to-the-trade houses have, since 1910, taken from the manufacturers the normal increased demand for ready-made clothing. They will continue to be the chief competitor of the ready-made clothing manufacturer in his bid for increased business. The advantage is all with the tailor-to-the-trade house. What the clothing manufacturer will do to offset these advantages is a question upon which depends the success of the ready-made clothing business.

SPECIALIZATION.

There is a marked tendency at present toward specialization. Many manufacturers have become dissatisfied with the waste resulting from showing complete lines. One house will manufacture pants,

raincoats, overcoats, and summer clothing. Within the various grades, good, medium, and cheap, we find certain firms specializing. One will make worsted suits of a certain price, another will manufacture only suits or overcoats to sell to the retailer at $10.50, and still another will make overcoats only. Although it is claimed that by making a complete line a manufacturer does away with the seasonal fluctuations in his business, the cost of getting out a complete set of samples for each of the various lines manufactured, to compete with the man who is manufacturing one line only, is enormous. The manufacturer who makes a complete line can not, as a rule, buy his goods as cheap as the specialist, for he does not buy great quantities of particular fabrics, linings, etc. The possibility of stock being left over is greater and its distribution more difficult. The salesman must talk several different commodities instead of one.

Probably the greatest loss suffered by the manufacturer with a complete line is his lack of concentration on any one. His judgment in the selection of fabrics for one particular line is not the best. He may have a complete line that is fair, but the specialist, who buys in quantities, who selects his fabrics with the purpose of manufacturing a particular thing, who adjusts his factory and trains his employees for the production of that particular thing, produces a better article at a lower price. Moreover, as a rule, retailers and their buyers no longer go to houses to purchase a complete line but go to one house for their $10.50 suits, to another for their $15 overcoats, etc.

If the specialist is capable and produces, as he should under a system of specialization, a garment that is the best on the market at the price, and the trade learns to associate him with that particular garment, enough business will result to run the plant during the major portion of the year. In other industries the specialist has been highly successful; the clothing specialist can likewise attain his goal.

MANUFACTURING CLOTHING NO LONGER A STAPLE BUSINESS.

Showing new styles constantly requires not only a great variety of cloths, much of which is left over at the end of the season, but also an expensive designer, without whose services no house can do business. The cutting of many different styles and the making of numerous samples and swatch books increase the cost of manufacturing. The manufacturer, as the season progresses, views with anxiety the shelves loaded with novelty materials that can not be used next year, and will cut prices on suits or overcoats made of these materials in order to get rid of them.

Manufacturers have, to their own detriment, educated the public to demand more stylish clothes. The woolen mills, in the first instance, were responsible for this condition of affairs. To stimulate their business they constantly made up new cloths and the manufacturer bought because the novelty would increase his sales. His competitor, not to be outdone, bought other novelty cloths. The profits derived from the increase of business due to the demand for stylish clothes are usually wiped out by the increased cost of manufacturing, the loss resulting from cut prices on goods of which too much has been purchased, and the depreciation on left-over fabrics at the end of the season. Only the manufacturer whose

purchases have been most judicious and whose manufacturing ability is of the highest derives any profit from this stimulation of business.

The public educated to buy stylish clothes also buys more ready-made suits than formerly. At first glance this increase in demand would appear to prove profitable to the manufacturer, but this is rarely the case. Formerly suits left over from one season to another could be sold at the original selling price or at a small loss. At present few left-over suits can be sold at any price. In the mad rush of manufacturers to create new styles, great quantities of novelty clothes of all sorts of fancy materials are made up, which have to be sold at any cost during the season in which they are manufactured. Therefore, toward the end of the season we find manufacturers selling out their stocks at 10 to 50 per cent of the original price, depending upon the desirability of the goods and the lateness of the season.

These conditions have caused many retailers to purchase for their initial order just what they need for immediate use and to wait before purchasing the remainder. Before long the manufacturer with much novelty cloth on his hands becomes anxious and will sell to this retailer at considerably lower prices than the initial ones.

This practice by retailers of waiting until the season is fairly under way before placing the bulk of their orders is increasing, because of the ease with which they can secure the goods they want at lower prices, by holding up their orders until the manufacturers become anxious. This practice not only destroys the value of any cost calculations the manufacturer may make, but results also in the inefficient speeding up of the factory and overtime work during a few weeks. The retailers, having placed their orders after the season has opened, insist on almost immediate shipment of goods. The manufacturer is compelled not only to sell at lower prices but to manufacture in a few weeks quantities of goods that should have taken months, and this hurried production greatly increases the cost.

The retailer's purchase of a small stock at the beginning of the season is made possible by the introduction in almost every store of racks upon which the suits are hung. Formerly, when the suits were piled up in bundles upon the tables of the retailer, he had to buy a large quantity at the beginning of each season to make the appearance of carrying a large stock, but with a rack 20 suits can be spread to cover the rack as well as 50.

CONTRACT SHOPS.

Many manufacturers, the smaller ones especially, contract with sponging houses to examine and sponge the fabric, or outer cloth; some do their own cloth examining and have the sponging done by contract. Most manufacturers let out the sewing-machine operating to contractors. The data regarding contract work collected during this investigation are shown in Table 38, which follows:

TABLE 38.—EXTENT OF CONTRACT WORK, BY ESTABLISHMENTS.

Groups.	Fabric examining.	Sponging.	Making coats.	Making trousers.	Making vests.
Group I. No operating (sewing) contracted:					
Establishment No. 1	No	No	No	No	No.
Establishment No. 2	Yes	Yes	No	No	No.
Establishment No. 3	No	No	No	No	No.
Establishment No. 4	Yes	Yes	No	No	No.
Establishment No. 5	Yes	Yes	No	No	No.
Establishment No. 6	No	No	No	No	No.
Establishment No. 7	Yes	Yes	No	No	No.
Establishment No. 8	(a)	(a)	No	No	No.
Establishment No. 9	No	No	No	No	No.
Establishment No. 10	No	No	No	No	No.
Establishment No. 11	No	No	No	No	No.
Establishment No. 12	(a)	(a)	No	No	No.
Group II. Part operating contracted:					
Establishment No. 13	Yes	Yes	Yes	Yes	Yes.
Establishment No. 14	Yes	Yes	Yes	No	No.
Establishment No. 15	No	No	Yes	Yes	Yes.
Establishment No. 16	No	No	Yes	Yes	Yes.
Establishment No. 17	Yes	Yes	No	No	Yes.
Establishment No. 18	No	No	Yes	Yes	Yes.
Establishment No. 19	Yes	Yes	No	No	Yes.
Establishment No. 20	No	No	Yes	Yes	Yes.
Establishment No. 21	Yes	Yes	Yes	Yes	Yes.
Establishment No. 22	Yes	Yes	Yes	Yes	Yes.
Establishment No. 23	Yes	Yes	No	Yes	Yes.
Establishment No. 24	No	No	No	Yes	Yes.
Establishment No. 25	No	No	Yes	Yes	Yes.
Establishment No. 26	Yes	Yes	Yes	Yes	Yes.
Establishment No. 27	No	No	No	Yes	Yes.
Establishment No. 28	Yes	Yes	Yes	Yes	Yes.
Establishment No. 29	Yes	Yes	Yes	Yes	Yes.
Establishment No. 30	No	No	Yes	Yes	Yes.
Establishment No. 31	Yes	Yes	No	Yes	Yes.
Establishment No. 32	No	Yes	Yes	Yes	Yes.
Establishment No. 33	No	No	Yes	Yes	Yes.
Establishment No. 34	No	No	No	No	Yes.
Establishment No. 35	No	No	Yes	No	Yes.
Establishment No. 36	No	No	Yes	Yes	Yes.
Establishment No. 37	No	No	Yes	Yes	Yes.
Establishment No. 38	No	No	Yes	Yes	Yes.
Establishment No. 39	No	No	No	No	Yes.
Establishment No. 40	No	No	No	No	Yes.
Establishment No. 41	No	No	Yes	Yes	Yes.
Establishment No. 42	No	No	Yes	No	No.
Group III. All operating contracted:					
Establishment No. 43	Yes	Yes	Yes	Yes	Yes.
Establishment No. 44	Yes	Yes	Yes	Yes	Yes.
Establishment No. 45	Yes	Yes	Yes	Yes	Yes.
Establishment No. 46	Yes	Yes	Yes	Yes	Yes.
Establishment No. 47	Yes	Yes	Yes	Yes	Yes.
Establishment No. 48	Yes	Yes	Yes	Yes	Yes.
Establishment No. 49	Yes	Yes	Yes	Yes	Yes.
Establishment No. 50	Yes	Yes	Yes	Yes	Yes.
Establishment No. 51	Yes	Yes	Yes	Yes	Yes.
Establishment No. 52	Yes	Yes	Yes	Yes	Yes.
Establishment No. 53	Yes	Yes	Yes	Yes	Yes.
Establishment No. 54	Yes	Yes	Yes	Yes	Yes.
Establishment No. 55	Yes	Yes	Yes	Yes	Yes.
Establishment No. 56	Yes	Yes	Yes	Yes	Yes.
Establishment No. 57	Yes	Yes	Yes	Yes	Yes.
Establishment No. 58	No	Yes	Yes	Yes	Yes.
Establishment No. 59	Yes	Yes	Yes	Yes	Yes.
Establishment No. 60	Yes	Yes	Yes	Yes	Yes.
Establishment No. 61	Yes	Yes	Yes	Yes	Yes.
Establishment No. 62	Yes	Yes	Yes	Yes	Yes.
Establishment No. 63	Yes	Yes	Yes	Yes	Yes.
Establishment No. 64	Yes	Yes	Yes	Yes	Yes.
Total	Yes, 36..	Yes, 38..	Yes, 43..	Yes, 44..	Yes, 50.
	No, 26...	No, 24...	No, 21...	No, 20...	No, 14.
	a 2.....	a 2.....	.....	.....	

a Not reported.

Contract shops may be divided as follows: (*a*) Inside shops, more or less under the supervision of the manufacturer and working exclusively for him; (*b*) outside shops, not under the supervision of the manufacturer employing the contractor, who may work for one or more manufacturers, but who usually gives preference to the work of one manufacturer on account of an agreement to that effect; (*c*) contract shops working exclusively for one manufacturer and more or less under his control. The last, in a sense, may be considered the manufacturer's own shops.

In this last class the manufacturer usually selects some foreman or superintendent from his own shops and sets him up as a contractor; that is, furnishes him with the machinery equipment and pays him a stated price per garment for making it, instead of paying him a fixed salary for supervision. The contractor, out of the amount received by him for completed work, pays the wages of his employees and all other expenses connected with his shop. The money he earns is the difference between his costs and the contract prices. In case he operates the shop at a loss, the manufacturer assumes the loss and charges it to the cost of manufacture. If, however, the contractor should continue to operate the shop at a loss, and the manufacturer should feel that the contract prices were fair, the latter would seek another contractor to place in charge of the shop.

Sometimes the contractor pays only his employees out of the amounts received by him for completed work, the manufacturer paying all other expenses in connection with the shop. It is hardly necessary to state that in the latter case the contract price would be considerably less than in the former case.

Some manufacturers prefer to have all garments made under their own supervision in their own shops, and utilize contract shops only in case of necessity. Some employ contractors for making vests or pants only, others employ contractors for making cheaper grades of coats, and others send all sewing-machine operating to contractors.

The contract system prevails to some extent in all clothing centers, and is more common in New York City than elsewhere. Generally speaking, there is a tendency toward less contracting in the making of the better grades of clothing. Where there is contracting for the better grades, the tendency, especially among the larger manufacturers, is toward inside contract shops or toward outside contract shops that the manufacturers control.

Following are some of the advantages which, it is claimed, accrue to manufacturers who employ the contract system:

1. When the contractor owns his machines the investment of the manufacturer for equipment is small.

2. Manufacturers relieved of labor responsibilities can devote their time and energy to other branches of their business.

3. Contractors, more easily than manufacturers, can secure all the help they require, because the contract shops are usually located where the workers live, and because the contractors are personally acquainted with most of the workers in their respective neighborhoods.

4. A contractor can make up clothing cheaper than a manufacturer because he pays less rent, according to space, frequently is his own foreman and bookkeeper, and, owing to his close personal supervision, he can get more work done for the same wages than a manufacturer can from his inside employees.

5. Letting out work on contract reduces the overhead costs of manufacturers, because during the two dull seasons of the year sewing machines do not remain idle in the factory, and foremen of machine operators do not have to be paid to hold the working organization intact.

6. The contract system enables the manufacturer to know readily, accurately, and in advance, the direct labor cost of each garment, thus making cost finding easier.

Some of the disadvantages claimed concerning the contract system are the following:

1. The manufacturer having no personal supervision over making the garments in contract shops, the product is lacking in uniformity, and often is inferior in quality to the factory-made product. Each manufacturer that lets out work usually has several contractors. The lack of uniformity in product arises from the fact that several contractors make the same grade of garments, that the contractors employ workers of different degrees of skill, and that nearly always work is more hurriedly done in contract shops than in the factory. Without supervising the machine operating and pressing, the manufacturer can not emphasize his style features, which are so important in his business.

2. Frequently contractors do not deliver finished garments on time. Where the manufacturer has no wagons, the contractor that has no truck must hire an expressman. The expressman does not work for him exclusively and he often has to wait until a trip is made. The failure to include certain parts when the bundles of cut goods are sent out necessitates a return to the factory. Lack of trimmings or wrong trimmings often hold up the work. The contractor's force, recruited from various sources in the busy season, has no stability. As the contractor often works for several manufacturers, and as the work from all of them generally comes at the same time, it is natural for him to make up first the goods of the manufacturer who supplies him with the largest amount of work or who pays him the highest price. The goods of the other manufacturers wait. Slow deliveries by contractors often cause the late shipment of goods ordered by customers of manufacturers, and in many cases such delays lead to cancellations of orders.

3. Aside from the alleged inefficiency of the system, the chief objection made to contracting is the insanitary conditions under which the work is done. The shops are generally located in poor neighborhoods where the employees can, without hats or coats, get to their work in a few minutes. Despite State regulation, many of the shops are said to be filthy, unswept, and unpainted, and to have neither sufficient light nor air. From a sanitary standpoint the contract system is claimed to be a menace to the worker and to the consumer who wears clothing manufactured under such conditions.

It is generally admitted that a better quality of clothing can be manufactured if all the garments are made up in the factory under the direct supervision of the management than if the work is let out on contract. It is, however, not definitely settled which is the most

profitable method of conducting business, having no contractors, or letting out part or all of the operating. As will be seen by tables in the chapter on "Cost and profit by establishments" (p. 52), the largest average percentage of profit was made by the establishments in Group III, in which all operating was contracted, the next largest average was made by Group I, in which no operating was contracted, and the lowest average was made by Group II, in which part of the operating was contracted, but the percentages for the three groups differed so slightly that the showing is not conclusive.

The contract system permits any person with a small capital to become a manufacturer. All that is necessary is to rent a small loft, hire a cutter, and send the work to the contractor. As no plant is necessary except a cutting table, many cutters, salesmen, and others conceive the idea of entering the business. Many such manufactories spring up every season, especially in New York. Their existence is possible only because of the contractor. Such manufacturers often last only one or two seasons, but they nevertheless injure the trade. In their anxiety to get business, which is very difficult for a beginner, they are generally compelled, if they are to do any business at all, to sell at prices that the regular manufacturers can not meet.

HOME WORK.

The home-work system, a survival of the old household stage of manufacturing, still exists to a large extent. Though the system usually is a part of the contract system and is understood by most people to be connected with that system only, there are many large inside houses that have their work completed in the homes of the workers. Some of these inside houses manufacture the finest grades of garments. The extent of home work could not be ascertained during this investigation, because many of the manufacturers included the wages paid to home workers in their direct-labor pay rolls, and contractors rarely kept any records at all. Though home work is not increasing, it is a very important problem in the trade, especially in New York. Chicago has less home work than New York; in both of these cities this class of labor is utilized to a considerably larger extent than in the other clothing centers. The following is quoted from the annual report of the New York Commissioner of Labor, 1914, page 77:

> Articles of clothing and flowers still engage the greater number of home workers. Out of a total of 16,849 persons found at work in the home in the whole State, 15,037 persons were employed on these two classes of articles. Dividing the articles of clothing into two grades, custom and factory made, we find 8,200 persons at work on the custom grade and 6,197 at work on the factory grade.

Outside of New York the home-work problem is not so important. Most of the concerns are large, and they have some standardization of product. They advertise their products, and since the consumer has a definite idea of the product of a particular house, the cost of the advertising is wasted if one garment is poorer than another. Most of these houses complete their work in the factory.

Home work consists principally of finishing, usually felling of various kinds on coats, pants, and vests, buttonhole finishing, and sewing on buttons. The home worker completes the garment after the machine work and basting has been done in the factory or shop. Machine work is rarely performed by the home finisher.

Although in some instances factory workers in the busy season take home work to be finished, home workers are usually not regular workers in the trade, and are not necessarily in a family working in the trade. Only a knowledge of plain sewing is necessary to do home work. The possession of such little skill by most immigrant women affords them the opportunity of entering the trade, and gives the users of such help an abundant labor supply. A few of the workers are German and Jewish women, but most of them are Italian. Probably all home workers are foreign born.

Home workers are almost exclusively married women with children, and they do not take in this work, as is so often stated, for "pin money." They go into the work to supplement their husband's meager earnings, affected usually by a seasonal trade, in maintaining the family. Not able to work in the shops, they work at home. They come from even poorer classes than the regular shop worker, and the work does not stop when the family has established itself in this country. The contractor's shop is located in the center of the home worker's neighborhood, and the home finisher or her children get the work from the shop and carry back the completed garments. The home worker has no regular hours, but does the finishing in what time she can snatch from her domestic work and care of the children. She works usually at night, as her time by day is usually fully occupied with housework. The work is done in the living rooms, with assistance from the children who are old enough to work.

There are many advantages to the employers of home finishers. The contractor in the busy season, when his manufacturer is pressing him for deliveries, has not sufficient finishers in his shop. The shop employee is not permitted by State regulation to work more than a certain number of hours per day, but a home finisher can work when she will. The State prohibits the employment, in factories, of children under certain ages, but the home finisher's children of any age can assist her if they are not detected. The contractor who is already making the most of his space can not, with the same production and price that he is receiving, afford to rent the additional space necessary for a full complement of finishers. The chief advantage from employing home finishers is the low price paid for the work. The home finisher is paid by the piece, the finisher in the shop by the week. As home finishers can not work in the shops, they are dependent upon the contractor or manufacturer supplying them with work. The contractor has taken advantage of this condition to pay the home finisher very low piece prices, which she must accept, or lose the opportunity of earning even that meager pittance. The contractor fosters the home-work system, for its discontinuance would necessitate inducing a large number of women to work in the shops, and would result in higher wages.

The trade-union is opposed to home work because home finishers can not be organized and because their low wages are held as a club over shop finishers.

Home work is a menace to the worker and to the community. The home finisher is usually overworked from her domestic cares. Home work is an extra burden. The home finisher usually has a large family that fully occupies her time by day and early evening. She has no spare time in which to do finishing work, unless the hours after

9 or 10 at night are considered spare time. Children are at work when they ought to be playing in the fresh air and sunshine or asleep in bed. The work is done amid all conditions of filth and disease. Home workers are not properly nourished, and their mode of living and lack of hygienic knowledge make them especially susceptible to contagious diseases, which are often not even reported. The Federal Government has recognized this danger from disease, and contracts for military garments now stipulate that all work must be done in a regularly organized factory, and that no part of the work is to be sublet to contractors. Though most States have legislation regulating home work, supervision and inspection are so difficult that the danger to the wearer of a garment finished at home has not been greatly curtailed. The following is quoted from the annual report of the New York Commissioner of Labor, 1914, page 78:

> The change made in the law, which aims to give the department control over the employment of children in the home under 16 years of age, is very complicated and most difficult of enforcement, in fact, can not be enforced as it is written. The responsibility sought to be placed on the factory owner who employs the parent to do the work in the home can not be made to work out in fact, as was desired in theory. To make this feature of the law really effective, responsibility should be made to rest directly on the person, parent, or guardian having direct control over the child, who compels or permits the little ones to help with the work.

The prohibition of home finishing may, as some claim, do away with one means of making a family self-supporting. However, the price paid by the worker and the consumer does not warrant its continuance. Public-spirited clothing manufacturers have assisted and will assist any attempt to abolish this source of danger to the community. The consumer eventually, when sufficiently educated to the point, will demand clothing made entirely under sanitary conditions.

THE EFFICIENT CLOTHING FACTORY.

THE FACTORY AND ITS MANAGEMENT.

The plant and equipment, the welfare of employees, the standardization of work, and the labor conditions are so important to successful manufacturing that the following detailed description is given of one factory that appeared to the investigators to be highly efficient and to have achieved excellent results:

The entire manufacturing portion of the factory chosen for description is on one upper floor, the inside walls and ceiling of which are painted white. The paint has a high gloss or porcelain finish, and can be washed. As a complementary color a mouse or battleship gray is used for the base of windows, pillars, etc. This gray color, the result of many experiments, has been found to be a good neutral color. The roof is of the saw-tooth variety, so angled that the north light only will enter the shop. All artificial lighting is overhead and the distribution of the light is even and so arranged as to cast no shadows. All machines are run by electricity.

Each employee has a locker for clothing, the men's and women's lockers being separated. Shower baths for men and special shoulder-high shower baths for women are also provided. The toilets are separated from the wash rooms. All sinks and washbowls are of white porcelain. Sanitary drinking spouts, continuous running water, liquid soap, and paper towels are conveniently located throughout the factory. The factory is swept every night, the floors are scrubbed every week and toilets every day, and the windows are washed every week.

In this factory there are no printed rules. By personal instruction the employee is taught to do the right thing. A full working force is employed at all times. If an employee leaves, even though another is not needed immediately, the vacancy is nevertheless filled. This serves to hold the organization together and gives the working force equal opportunity. The practice of this firm, whenever necessary, is to put the whole force on part time and not to give part of the organization all the work.

The whole plant never works overtime, the management being fully convinced that overtime makes for inefficiency, because it has a deleterious effect on the health of the worker. A well-trained worker puts forth his best efforts in his regular working hours, and any effort beyond that will affect his productivity the next day. In cases, however, where the "balance" of production in a section of the factory is out of equilibrium, overtime may be worked by those operators who are behind in their work. In any case the total overtime must never exceed six hours per week. On week days only one hour overtime is permitted. If three hours' overtime are to be worked on Saturday, which is a short day, only three hours can be worked on the other days of the week. The consent of the superintendent and general manager is necessary to work overtime.

Except Saturday, which is a short day, the working day starts at 7 a. m. and ends at 4.30 p. m., at which time, or whenever the task for the day is completed, all machines and what goods are finished are covered for the night. The day's work ends at this early hour, so that during practically all the year the work may be done by daylight. Finishing at 4.30 p. m. also permits the employees to take advantage of the various activities arranged by the service department.

The employees are taught to dress in simple fashion, for it has been found that a person can not sit at a machine and work efficiently in clothes that are unsuited for the work done in the factory. The wearing of a bracelet, for example, not only hampers the arm movements but is dangerous.

This factory is one of the few that has not lost some of its effectiveness because of its size. The personal relation between employer and employee, which is of the utmost importance, is lost in most large factories, where the worker knows only the foreman or superintendent, and where the employer is only a name. In this factory the owner knows every employee. He calls them by their first names and knows all their home affairs. On his rounds through the factory he will stop and chat for a few minutes with Mary about her father's health, with Tom about his savings account, etc. Because of the mutual understanding and good feeling between employer and employees, assistant foremen have been found unnecessary.

The owners of this factory believe that the point of efficiency is not to create tests to discover a good man, but to take the worker who is of the proper timber and train him to be efficient. A department of trained and expert instructors is maintained. An instructor will train

"green hands" in correct methods and impress them with the importance of a high quality of workmanship. If necessary, the instructor will call in an expert from the time-study department. Instruction is based upon a scientific determination of the one best way, by motion and time studies and by actual try-outs, which has resulted in maximum production with minimum effort. Recognizing that speeding up is not to be accomplished by driving, but by standardization, this factory insists that the operation must be performed in one standard way and no other. For every operation in the factory directions are printed on a card, which is given to the operator. A copy of one of these cards follows, the time being expressed in hundredths of a minute:

Operation, 2 flaps and 1 welt sewed around.

Sewing machine, Singer 44-8.
Speed, 2,400 R. P. M.; stitches, 8; needle 2.
Foot, ⅛ gauge; feed, regular.
Attachments, trimming knife.

Pressing machine.

Seat, chair. Height: F., 17½; R., 16½.
Table, machine. Height, 29.
Work container, tray 28 by 18½ by 5, on top of stand 30 by 20 by 16 high, with edge to hold tray.
Waste container.
Tools, 7-inch shears.
Construction material: Panama linen stays cut to designer's pattern, with identifying notches cut therein. 3-line 40 cotton thread.

U.	E.	Description.	Time.
A	1	Open up one set flaps and welt, then match welt and stay	0.09
B	2	Sew together, then pull clear of machine and cut thread with shears	.04
C	3	Trim welt with hand shears	.04
D	4	Match welt and lining and place in machine	.04
E	5	Sew across top of welt, joining lining	.03
F	6	Remove and place in machine again at end of welt	.05
G	7	Sew across end of welt	.02
H	8	Remove and place in machine again at other end of welt	.05
I	9	Sew across end of welt, break thread between two end seams, then pull clear of machine without breaking thread	.04
J	10	Match flap, stay, and lining	.07
K	11	Place in machine, start, depress trimmer, sew together and trim around three sides, raise trimmer, finish, then pull clear of machine without breaking thread	.06
L	12	Match flap, stay, and lining	.07
M	13	Place in machine, start, depress trimmer, sew together, and trim around three sides, raise trimmer, finish, then pull clear of machine and cut thread with shears	.07
N	14	Roll one welt and two flaps together and place in tray at left	.07
		Total operation time, one welt and two flaps	.74
		Time allowed for—	
O	15	Rethreading needle 0.02	
P	16	Removing and replacing bobbin .02	
Q	17	Marking batch number and count on time slip and taking away work .01	
R	18	Getting and opening up new work .01	
S	19	Unavoidable delays .05	
		Total time allowed per unit of production	.11
		Total operation and allowed time per unit of production	.85

A record is kept of the earnings of each employee for every week in the year. These records are examined every day to see how employees are doing. The service department does not wait for an employee to make a complaint. If an employee's wages are decreasing, he is summoned for an interview, and the causes for the decrease are sought for, found, and eliminated. If promotion is not fast enough, the reason is sought and, when found, eliminated. The service department makes its recommendation to the various superintendents and foremen and the general manager, and all work together to aid the employee in question. For each employee a

sheet is kept showing his record for six months, in fortnightly periods. Following is one of these records for a two-weeks pay period:

Name: Mary Smith. No. 142.
Operation: Coats seamed.
Class rate: $0.30–$0.24.[a]

Day.	January.	Hours worked.	Daily earnings.	Cumulative earnings.
Monday	4	8¼	$2.383	$2.383
Tuesday	5	7¼	2.292	4.675
Wednesday	6	8¾	2.58	7.255
Thursday	7	8½	[b] 2.625	9.880
Friday	8	8¼	2.428	12.308
Saturday	9	4¼	1.215	13.523
Monday	11	8¾	2.703	16.226
Tuesday	12	8	2.368	18.594
Wednesday	13	8¼	2.519	21.113
Thursday	14	8¾	[b] 2.586	23.699
Friday	15	[c] 9¾	2.826	26.525
Saturday	16	4¼	1.266	27.791
Total earnings				$27.79
Number of hours worked				93¼
Average per hour				$0.297

[a] The class rate for this operation is from 24 to 30 cents per hour. The employee must earn more than 24 cents per hour to work on this operation.
[b] On these days the worker was changed to another operation to help out and was paid the flat rate of her hourly average earnings on her regular operation.
[c] Overtime.

By inserting letters next to the number of hours worked, records are kept of tardiness, going home after being excused, etc. The form also stipulates the number of garments returned for correction during the two-weeks period and the number of merit marks received by the operator. This record can be used in making up the pay roll.

An employee can be discharged only upon a written recommendation, approved by the proper superintendent and by the service department, and the employee has the privilege of seeing the general manager personally. Employees as a rule are not discharged. If a girl is not suitable for one operation, she is trained for another, until the operation has been found for which she is best suited. An employee may be discharged for drunkenness, lack of cooperation, or lack of adaptability to any operation, but in the latter case the factory endeavors to find a suitable position for him before he is discharged.

No employee who has been absent can return to work before reporting to the office. Girls who are absent without having spoken of it previously, are visited by an officer of the service department. Employees are shown that absence or tardiness throws their section behind and causes other employees to lose money. A sheet is sent to the office every day showing the names of returned absentees, the reasons for their absences, the time during which they were absent, and whether or not they were excused; the names of quitters and new employees, and the names and excuses of tardy employees.

This factory maintains a time-study and a machine department, each in charge of experts. Together they work out the best speed for every machine used in various operations, decide on the best arrangement of the work boxes, attachments, feeds, and all conditions of

operation. These departments are also constantly experimenting with old and new machinery.

An operator in this factory never oils or cleans a machine, or adjusts a belt, etc. This work is done by the machine-repair department. Oiling a machine requires a great deal of skill, for too much or too little oiling will cause damage and waste. The first season that operators in this factory were not permitted to oil their machines, oil spots on goods decreased 75 per cent. Every machine in the shop is oiled twice a day and some machines as often as four times a day.

Two or three times a week, at a meeting of all the superintendents, current factory problems are discussed and ideas for improvements are considered.

Orders that come in are put in a lot ledger arranged according to the model and style of goods. Orders are so distributed in the lot ledger as to show the customers' numbers and the sizes ordered by each. Cutting orders are made up from the lot ledger, which permits all lots of one kind to be bulked. When the cutting order is returned from the marker, it is sent to the lining department, and the linings are cut from the same order. The planning department of the cutting room arranges these orders with a view both to the time in which they are needed for the purpose of filling orders and to the proper distribution for manufacturing purposes. It might be well to point out that most factories cut their goods when they are ready to make them up, thus often losing the savings of bulk cutting. In this factory the goods are cut and stored, to be taken out and used whenever needed.

Every model when originated is analyzed by means of a model analysis sheet, which classifies and values for purposes of manufacture the different model variations. These values determine the number of the particular model in question that is to be put into work for the purposes of efficient manufacture. Each model sheet has the number of that model to be put into a thousand units of manufacture. When the cloth, lining, or other parts are cut, they are routed to a particular box by having the box number entered upon the cutting order. In this way all parts are collected and assembled from the various cutting operations and remain in storage for distribution. When the cutting card is finally returned to the planning clerk, a small auxiliary card, known as the shop manufacturing card, is made out. These are filed with the planning clerk and each represents a batch of garments in the storeroom ready to be distributed for manufacture. With the aid of the model analysis sheet, the planning clerk distributes the work on hand in the storeroom, assigning to it both a place and an order of manufacture by means of a numbering system. The batch or route number is placed on each manufacturing card by the planning clerk for this purpose. When this has been done, tickets are made out, all part tickets showing the batch number. This enables the proper order to be maintained throughout all processes of manufacture. The issuance of the shop manufacturing card by the planning clerk is not only the basis of making out the tickets, but also constitutes a requisition to the storeroom for ordering work out to the factory.

The manufacturing card at all times accompanies the goods. When goods are issued to the workshop the card accompanies them to the first route clerk. The route clerk assigns the work to each operator. The operator must, however, get up and take the work from a conveniently-located ledge or table. This is insisted upon by the factory. Sitting at a machine constantly puts the operator on edge and keeps her "keyed up." This walking a short distance in order to get her work, acts as a relaxation and a relief from fatigue and has been found more effective than definite rest periods. For the same reason an operator must go to a small conveniently located supply room, a sort of substation of the main supply room, for her thread, buttons, and cut trimmings. A girl requiring a new spool of thread must return the empty one.

The arrangement is such that goods pass from one operation to another with the least loss of time. This factor is one that is usually disregarded in the clothing trade and one that to a great extent is responsible for smaller production.

The route clerk marks the number of operations performed by each operator on a specially prepared slip, which is attached to the operator's machine. This slip is printed and contains 500 very small squares representing the piece price per operation multiplied by the number of operations performed, from 1 to 500. This slip serves as a basis for the pay roll, and at the close of the day's work is handed to the foreman, who turns it in to the office.

Descriptive tickets are put on those parts of the garments that are made separately. This ticket by number or letter denotes the batch number, size, shade, single or double stitch, class of trimming, color of thread, hand or machine buttonholes, etc. These tickets are made from the manufacturing card, and are important, as they prevent different shades of cloth being used in the same garment, the using of the wrong shade of thread, etc.

Every operating section has a signboard which starts clean every morning. In the office a task is set, that is, so many coats, or trousers, or vests, are to be turned out that day. This task is given to the foreman, who in turn set the tasks for the various operations, so that at the end of the day the factory task set by the office will have been accomplished. The foremen chalk up on the various signboards the task for each operation, above which the route clerk, when a batch is completed, posts the number finished up to that time. These figures are changed whenever a batch is completed. Thus at any hour of the day the foremen and the workers have always before them, not only what they have to accomplish, but also what has already been accomplished. When the task for any operation has been completed before the general closing time, the employees on that operation are not permitted to remain around the machines, but must leave the factory floor, going to the game room, shower rooms, or home. If one section is compelled to wait for another, which is unusual, the employees of the waiting section must go to the game room, where a woman reads to them, or where they may play games, etc.

The setting of the task for the day is a question of keeping the shop "balance." It is known how many units the shop can turn out efficiently in a day, and the task is set to maintain this balance. This assures sufficient work for every day in the year. If there is too much or too little work at the established balance, the balance is changed.

With the manufacturing card come small red, green, or yellow tickets, which show the lot number, batch number, model, and amount. A red ticket signifies that the goods are to be rushed. This does not mean ordinarily that they will be made up quicker, but that they are given preference; that is, they will be put into work first. Where a special rush is required a route clerk remains with the batch and follows up the work from one section to another. The green ticket denotes custom work, which is to be rushed also. This ticket is to distinguish custom work (made-to-order specials for customers), so that if an inquiry is received from the customer, it will be possible to tell where the garment is by looking at the control board, and to rush it through if necessary. The yellow ticket denotes regular work. If for some reason one batch can not follow in its regular order, a blue ticket similar to the yellow one is made out and passed in regular order to the next section. The yellow ticket remains in whatever section it happens to be. A blue card is made out at the same time for the route clerk and the workers, so that they will lose no time looking for that batch. When the cause for the delay has been eliminated, this batch is given the preference.

Each department (coats, vests, and trousers) has a large wooden board called a control board on which there is a space for each section of a department. On a ticket at the top of this space is the number of units that have been turned out by this section, and below the number of units still in process. These little tickets hang on hooks, and when a batch is completed, the ticket is taken off, and the amount of it is added to the number registered as having been turned out and deducted from the amount registered as being still in work. The ticket is passed on to the next section and hung up, being added to the amount already registered as being work in process in that section. The route clerk, upon the completion of a batch in a section, notified a clerk in charge of the control board, who makes the necessary changes on the board and on the route clerk's manufacturing card.

Each section has also two little tickets showing the maximum and minimum amount of work that should be done in that section in order to assure efficient production. From these minimum and maximum cards the flow of work is regulated. Assuming that there are four sections and that the first two are in "balance," and the third is in excess of the maximum, the task of the first two would be reduced so that section three would receive less work. This would continue until section three was again in "balance." If, however, section two is under "balance" and section one is in "balance," the task would be increased in the first, lowered in the second, and increased in the third section.

In the general manager's office is a large control board for the entire factory, a glance at which informs him as to how the factory's production is progressing. The following chart will show a section of this control board. The figures used do not represent the actual production:

SACK COATS.

	SPRING 1915.	SPRING 1914.
(A)	26002	34076
(B)	20567	28910
(C)	5435	5166
(D)	210	
(E)	Daily. 312	
(F)	Wk. Cu'ml. 1680	

(A) Estimated number to be made that season from orders in the house. These figures are changed every two weeks.
(B) Number produced to date. These figures are changed daily.
(C) Balance to be made.
(D) Number of cut goods in the storeroom ready to be put in work.
(E) Finished garments shipped on the given date.
(F) Finished garments shipped to date in the current week.

A similar arrangement is made on the same board for trousers, vests, and overcoats.

THE WAGE AND TASK SYSTEMS.

All wage systems are to reward labor for its effort in proportion to that effort over a given period of time. Most systems take into consideration the time period, but do not consider that every worker in an organization expects a reward (sharing of the profits) in proportion to his effort and ability. The time method is very simple, so much per week, day, or hour. The two usual methods of reward, daywork and piecework, are good in some respects and bad in others. The day method, as ordinarily applied, leaves out the question of effort, no additional return for better or greater effort being given. The piecework method, as ordinarily applied, is not based on accurate standards and reduces the piece price to absolute bargaining or guesswork. Piecework, however, has an element of reward for effort. A day rate could be applied accurately and would be acceptable if something were added in the nature of a bonus for effort. This would be a combination of day and piece rates, of which the premium or bonus system is an outgrowth. Whether recognized or not, time

is an essential element. The whole wage system, to be fair, necessitates a fair return for effort expended over any given time, and as a rule it is because piece rates have not been considered from this point of view they have failed to give satisfaction. Piecework has that which daywork has not—the incentive to increase production; but ordinarily the gain in speed, with its resulting higher pay, leads to the piece rate being reduced. A wage system, to be fair and systematic, must be direct, simple, and absolutely safeguarded against abuse.

What is a fair pay for a fair amount of effort? The factory described has taken the problem out of the realm of bargaining by applying scientific management and by recognizing not only that good pay is a deserved reward for a good amount of effort, but that a high rate of pay is an incentive to the best efforts of the worker, and, further, that a high wage does not mean high cost but is a basis for low cost.

To take this matter out of the realm of dispute, and to recognize what is, and should be, uppermost in the mind of the worker—not only immediate earning opportunity but the opportunity to advance—this factory has evolved the following system: All operations are classified so that operations requiring the same skill, age, and effort fall in the same class. From an investigation of actual time-study records and the experience of efficiency experts, rates have been determined for each class of work. These rates are the best rates paid for each class of work in the best shops doing the same grade of work in that locality. The factory started with these rates as a minimum rate for each class. As a standard rate of pay, 25 per cent more than the minimum rate is paid in each class, as follows:

MINIMUM RATE.	STANDARD RATE (MINIMUM RATE+25 PER CENT).
32 cents per hour.	
28 cents per hour.	40 cents per hour.
24 cents per hour.	35 cents per hour.
20 cents per hour.	30 cents per hour.
16 cents per hour.	25 cents per hour.
	20 cents per hour.

This classification makes a distinct standard for each class of worker. It recognizes differences in the valuation of skill, effort, etc., and establishes stages by which a worker can advance. The workers are encouraged to apply for positions in any class.

The only remaining question is, What is a fair hour's work? This is, fortunately, not a question of judgment, for there has been developed in recent years the science of time and motion study, which standardizes conditions of operation. This factory's time-study department, with the experts from the machine department, determines the best speed at which to run the machines for each operation, the arrangement of the work boxes, attachments, feeds, and all other conditions of operation. These conditions are studied by the time-study and machine departments with the cooperation of other experts and the operators themselves.

Time-study gives accurate proof. These conditions must be maintained by periodic inspections and by a properly organized maintenance and repair department. It is only when conditions

have been standardized, properly recorded, and made a part of the instruction sheet, that time-study relative to the personal effort of an operator can be of value.

The chief function of time-study is dividing an operation into its various elements, so that the elements can be accurately studied. This division gives a wide field of comparison, inasmuch as the same element repeats itself often in the various operations. It eliminates the possibility of a material error. Allowances are made, however, for possibilities of error, delay, fatigue, emergencies, and other factors.

This factory also uses a productagraph machine to check the time necessary to complete an element. In the case of the more important elements the machine is used to test one operator for a week. This machine is used also to make sure that the allowance time for personal necessities is correct, to determine other factors that hinder production, and to discover the causes for fluctuation in production. The use of this machine has, for example, led this factory to purchase wound bobbins, on which the thread is cross wound, so that the tension is uniform. After a time-study it was found that, though the cross-wound bobbin costs 20 per cent more for the material, it saves 50 per cent of the time required to adjust difficulties arising from breaking thread, etc.

The number of units completed by an operator, as shown by the productagraph record, and the number of idle minutes from 7.30 to 11.30 a. m., are given in the following table:

Time.	Edges stitched.	Idle time.
	Units.	*Minutes.*
7.30 to 8.30 a. m.	16.00	12.15
8.30 to 9.30 a. m.	19.00	7.59
9.30 to 10.30 a. m.	19.00	7.84
10.30 to 11.30 a. m.	25.00	5.61
Total, 4 hours	79.00	33.19
Average per hour	19.75	8.30

To measure and standardize a worker's effort and his reward it is essential that a task be set. The basis of output in this factory is one hour, and the task is the standard of individual hourly production.

In setting the task an operation is analyzed into its easily distinguishable parts or elements, and an observer then notes by the aid of a stop watch the time, in minutes and hundredths of a minute, required to perform these elements of the operation. The number of observations taken depends on the complexity of the operation and the number of people employed thereon. Usually hundreds of observations are taken, the operation being performed always in the same manner, according to the instruction sheet, which is based on what is considered to be the one best method of performing that operation. These element times are posted on sheets, and the time that occurs oftenest or may be said to be common to two or more operators is selected as the standard time for that element. Each element in turn is similarly treated. The only exception to this rule is where the times are very variable, as in some hand operations, in

which case the best average is used. The time is taken on the best operators in the ordinary course of work, no special inducements being offered or special conditions created for the test. These element times are totaled and checked with the total time of the operation, which has been taken simultaneously with the taking of the element times. In no case is the task set higher than has been actually accomplished under observation.

In addition to the element times, certain allowances are made for rethreading needles, removing and replacing bobbins, taking away completed and getting new work, personal necessities, etc., all of which are based on another series of observations, made on each one of these delays and extending over long periods of time.

Excluding the allowance for unavoidable and other delays, the task is based on a 56.25-minute hour; that is, 3.75 minutes are allowed for various delays in every working hour. For example, let us assume the total of the element and allowance times is two minutes. Dividing two minutes into the 56.25 minute hour we get 28.125 units of this operation to be performed in one hour. The standard task on which the piece price is set is, however, only 90 per cent of this 28.125 or 25 units per hour (for this operation). The standard piece price is the standard class rate divided by the standard hourly task. In the above case, if the standard class rate[a] was 40 cents per hour, the standard task being 25, the standard piece price would be $0.016.

The piece price, once thus determined, is permanent. After a worker has established himself in a class he is kept in that class or put in a higher one, but is never allowed to drop below his class. If his earnings are below the minimum of the class and the fault is not entirely his, he is paid the minimum rate, his pay being in this case on a sort of day-rate basis. If the fault is entirely his, he must stand his loss and is paid just what he earns.

A new hand is started at a certain rate, depending upon personal conditions. There is a minimum for certain beginners, as in the case of a married person, a girl supporting herself, or a girl under 18 years of age. Each beginner or old hand that is working on a new operation is given an initial allowance or handicap, depending upon the circumstances. Let us assume that the initial allowance is 20 cents per hour. The first week the worker would receive half of the initial allowance, or 10 cents, plus what was actually earned according to the piece price rate. If this sum is less than the 20-cent initial allowance the worker would be paid that initial allowance of 20 cents, and the next week the initial allowance would be the same. Generally the allowance for the second week is only 18 cents per hour, a progress of 2 cents per hour during the second week being expected. The progress during the first week varies with the operator and the operation, but the 2-cent weekly progress, though not definitely fixed, is the usual progress expected, until without the aid of the allowance the operator establishes herself in her class; that is, without the aid of the allowance she earns more than the minimum of her class. The average new hand establishes herself in a class in two months or less. The allowance is continued only if the employee puts forth a reasonable effort. If she is lazy, the allowance is cut down or may be discontinued.

[a] See p. 168.

Suppose that the factory is short a seamer and that it is necessary to fill this place at once. A hand who formerly did seaming but who is now on a different operation will be used to fill up the vacancy. Her last earnings when seaming were 26 cents per hour; not having been doing this work recently, however, she can not be expected to earn, let us say, more than 22 cents per hour when returning to seaming. But her earnings at the other work are 30 cents per hour, so that in this case the hand would be given an allowance of 8 cents per hour plus the actual earnings at the piece-price rate.

It is interesting to note the examining method in vogue in this factory, which is probably without parallel in the clothing trade. Inspectors or examiners are paid at a rate estimated on the task basis similar to the regular operations. For a rejection of a garment by the examiner that is sustained by the inspecting foreman, the examiner is paid a bonus, varying from 30 per cent to 100 per cent of the original inspecting price. A rejected garment is returned by the inspecting foreman to the operator who did the work and who receives a demerit mark. The inspecting foreman not only must have the error corrected but is expected to discover the cause and to show the operator how to eliminate that cause. When the error has been corrected the examiner who reexamines the garment is paid for the reexamination as if it were a new garment. An operator who subsequently works on goods that are already imperfect and that would affect his work is given a demerit, just as if he had made the error himself. But if, instead of continuing work on a faulty garment, he should return the work to the inspecting foreman and be sustained, the examiner who passed the work must repair it on his own time, if possible, and, if not, he loses his price of examining plus one bonus. The operator who returned the work receives a credit mark. These demerit and credit marks are carefully considered when the question of promotion, etc., comes up.

THE SERVICE DEPARTMENT.

Recognition that the human element is a big factor in manufacturing, that without proper regard for the interests of the workers the best results can not be attained even in the factory with the finest mechanical equipment, has led to the establishment of welfare work. Unfortunately some manufacturers who spend money for this work regard such expenditures as philanthropy and the worker in such a plant is taught that he is receiving something for nothing. The factory described, however, regards welfare work as a cost of running its business, and recognizes that cost of production depends more upon the ability or inability of the worker than upon any other single factor. It is spending this money with the certainty that it will receive an ample return in the form of more skilled, healthier, happier, and more efficient workers, with a resulting greater production and finer product. Since the term welfare work is in a sense repugnant both to the management and to the employees, the work in the factory under consideration is called service.

The service work is not performed in a haphazard manner, or from time to time as the fancy of the owner may dictate, but is an important regular part of the factory organization under the charge of a special service department. At the head of this department is a

specially trained woman, known as the service superintendent, who has responsibilities second only to those of the general manager. Employment, discipline, dismissal, training, health, all are under the immediate direction of this department.

Employment.—When a new hand is to be taken on, the applicant reports to the service department for a personal interview. Questions are asked to ascertain the applicant's attitude toward work and the general fitness of the applicant for the organization. The requirements and conditions of engagement are explained in detail—the debilitating effect of doing outside work, regularity in attendance, and submittal to medical, dental, and ocular examinations, etc. It will be seen that this factory is very careful in the selection of its help, its belief being that with the proper raw material highly efficient workers can be produced under proper guidance and instruction. A card in the following form, which is kept as a permanent record, must be filled out for every applicant:

APPLICATION RECORD OF SMITH, MARY.

Applied 5/11/14. Address, ————. For machine work. Birth date, Aug. 14, 1893. Birthplace, Pittsburgh. Suitability, good. Immigrated, ——. Parentage, German. Married, ——. Family, 2 sisters (12, 4), 1 brother (20), father, and mother. Wage contrib., all.
References (in our employ), Mary Jones, cousin.

Previous employment.	Time.	Capacity.	Wage.	Why ended.
John Brown & Co.....	1 yr.....	Clerk.....	7.00	Small wages.

Employed 7-23-14, by ——. Class, W. P. W. No., 142. Rate, P. W. Operation, coats seamed. Locker, 728. Fore, ——. Checked, ——.
Approved, ——. Signature, ——.
Qualifications: A 3; M 3; 2 plus G 3. Languages, English and German. Education, Seventh grade, Jones School.
NOTES.—Father a teamster, working in American brick yard; brother doing clerical work. Mary a very good type of American girl. Has done sewing at home. Anxious to work here because her friends are here.

This factory maintains an emergency hospital and a well-equipped consultation room, with an examination table, a dental chair and cabinet, eye charts and lenses, and a nurse's desk and couch. A nurse is in constant attendance and keeps the medical record of each employee. All new employees must be examined by the nurse. No worker is permitted to go home during working hours without the consent of the nurse, except as has been explained. All absentees who have been ill must report to the nurse before returning to work.

A physician visits the factory three times a week. Where the ills are slight, he treats them at the factory. If they are more serious, he treats them at his office or at the employee's home at special rates. A dentist is in attendance at the factory once a week. He gives prophylactic treatment and makes examinations, but does no repair work. He advises and recommends. He does repair work at his office at special rates, or, if an employee wishes to go to his own dentist, estimates the price that he should pay. Twice a week an oculist calls at the factory. Every new employee must undergo an eye examination. The oculist examines and advises, and, like the dentist, if employees wish to go to their own oculist, estimates the price to be paid. The factory oculist has an arrangement with an optical company whereby glasses, when necessary, may be procured at a discount of 50 per cent.

The factory endeavors to have each employee examined by the physician, dentist, and oculist at least once in six months, or more often when necessary. Each employee who needs attention must receive it, and it is a compliment to the spirit of the workers that in no case where such treatment was necessary have they been unwilling to undergo it.

Dining rooms.—There are separate dining rooms for men and women. Each employee is assigned a chair, which becomes his permanent place. Care is taken to place the employee near his friends, or where he will possibly get the most good out of his neighbors. Each table is presided over by a mature man or woman. Packed lunches, consisting of crackers, two sandwiches, a relish, fruit and cake, are served at 10 cents for those who do not wish to bring their lunch. To satisfy the tastes of the various nationalities employed, the factory purchases the food and packs the lunches. Hot soup is served at 2 cents a bowl, coffee at 2 cents, and tea at 1 cent a cup, milk at 2 cents, buttermilk or lemonade at 1 cent a glass, and ice cream at 3 cents a plate. The general manager, service superintendent, and heads of the various departments all partake of the same lunch. The Bureau's agent, who had the pleasure of sitting at one of these lunch gatherings, found the food simple but wholesome and substantial. The factory last year expended upon this department more than total the receipts.

Bank and loans.—The factory conducts a penny bank. An earnest effort is made to interest all the employees in saving. Deposits of 1 cent will be accepted, though the employees never deposit less than 5 cents. To stimulate the interest in saving the factory pays 6 per cent interest. When an employee has saved $100, the money must be withdrawn and deposited with a city savings institution. At the time of the agent's visit, 50 per cent of the employees had bank accounts.

The factory has found that habitual saving increases production; in some cases the earning capacity has increased fully 50 per cent as a direct result. The factory has found that when employees turn over all their pay to the family treasury there is no incentive for working harder. The service department in such cases endeavors to make arrangements whereby the employee is allowed to keep a part of his pay for saving. In such cases the employees consider what they deposit as a bonus and work hard to increase it.

In connection with the bank the factory has a loan department, from which, in cases of special necessity or emergency, employees may borrow money up to a limited amount, without interest. The loans are usually small, but occasionally have been as high as several hundred dollars. The amount of the loan is deducted from the employee's pay in amounts proportionate to the earnings. The firm has never lost money on these loans.

Library.—The factory has an arrangement whereby the city library has established a branch in the factory. Once a week a delivery of books is made and books no longer desired are returned. An effort is made to encourage systematic reading. Employees may take these books home. A factory library also is being built up, consisting of standard works on efficiency, business methods, etc., and these are frequently borrowed by the foremen and instructors.

Several business and efficiency magazines are also on file, the items of interest to supervisors being marked.

English class.—By arrangement with the board of education of the city, a class in English for foreigners is held at the factory on Tuesdays and Thursdays, from 4.30 to 5.30 p. m. All foreign-born employees must attend these classes until they can speak and understand English. The board of education supplies the textbooks and a public-school teacher. The foreigner at work or in the dining room is placed between English-speaking employees, which assists him to learn the language rapidly. At first the factory urged the learning of English, but only a few attended; those who had been in this country the longest and knew the least English and the dullest were the ones who would not attend. Compulsory attendance was then resorted to, but at present all the students who attend the classes do so voluntarily. When a man is ready for citizenship he is assisted in being naturalized.

The learning of English makes for greater efficiency. Ability to speak foreign languages is no longer the chief asset of the foreman or superintendent, regardless of how poor his other qualifications might be. Ability to speak English does away with the need of interpreters and permits the heads of departments to speak directly to the help. It makes for greater teamwork among the employees. At first it was noticed that when a foreigner sat among American or English-speaking employees there was a lack of unity, the non-English speaking employee being regarded as an inferior, but that as soon as this employee learned to speak English the others regarded him as one of themselves, and all then worked together with greater efficiency. When one considers that in the clothing trade almost the entire working force is composed of foreigners the great importance of teaching English will be realized.

Playground and game rooms.—No employee is permitted to remain in the workroom during lunch time. Separate playgrounds are provided for men and women. The girls play baseball, volley ball, etc., and those who do not play sit on shaded seats. The men usually play baseball and quoits, the manager and superintendents playing with the men. Occasionally the girls' team plays against the men's team, and a healthy rivalry is the rule. For those that are not active there are separate game rooms for men and women and a smoking room for the men in which boys are not allowed. Current magazines are provided in these rooms.

Dancing.—The factory pays a dancing instructor who once a week, from 4.30 to 5.30 p. m., instructs the employees in modern dancing. Dancing is resorted to on days when the weather does not permit outdoor activity. There is a piano in the building. Every Wednesday at noon a dance is held for which the shop orchestra furnishes the music. Occasionally the girls when going out to dance in the evening invite the heads of the service department to accompany them.

Choral society.—On Fridays, from 4.30 to 5.30 p. m., a choral club is conducted by a well-known musical director, and annually in May a concert is given, which arouses great interest. The average attendance at the weekly choral meeting is about 150. The members pay 5 cents per meeting. A visit to the workrooms will find many of the employees singing at their work. This factory believes that the happy worker is the productive worker.

Parties.—At intervals parties are given by one or more sections. The arrangements are made by three committees of the employees, the committees being large enough to give most of the employees an opportunity to serve, thus encouraging democracy and good feeling. Refreshments not to cost more than 15 cents are served. Friends and relatives of the employees are invited and entertainment is furnished by local talent in the form of music, recitations, various national dances, etc. The manager, superintendents, and foremen, with their wives, mingle freely with the employees at these gatherings, and Americans mix freely with foreigners. Friendliness and good will are fostered and increased. The parties commence after supper, which may be had, if desired, in the factory, and last until 9 p. m.

Personal relations.—As often as necessary, for example, when the earnings are decreasing, the employee is called to the service-department office and interviewed. Here frank discussions as to the personal affairs of the employee are indulged in, and causes making the employee inefficient are sought for. The department counsels on all affairs, even the most intimate. It may decide that a change in operation is necessary. If this interview does not accomplish results, the home of the employee is visited. Sometimes it is found necessary to advise mothers of the injurious effects of girls sleeping with several others in one small room, leaving home without breakfast, or doing a heavy washing before coming to work. Often the pay roll of other girls who are earning more money is exhibited. As a rule these home visits bring results. Another feature of this personal relationship is visiting day. On the first Friday afternoon of each month the parents and families of the employees are invited to the factory, and a sympathetic cooperation between the service department and the home is established.

Recognizing that employees, while they may do things efficiently in their own personal affairs, are not executives, all the foregoing activities are carried on, not by the employees, but by a capable service department, to the activities of which 34.11 per cent of the total factory floor space is devoted. The factory comtemplates installing in the near future a pension and a life-insurance system.

Discussion of welfare work.—The present standard has not been achieved without a great expenditure of money, time, and energy. The employees originally were opposed to these "new-fangled ideas." The greatest fight the factory had was making the employees feel that these innovations were the steps to personal advancement, showing them the spirit of the undertaking, making them realize the benefits of cooperation, unity, and teamwork. It was a long, hard struggle, but it was eventually won. All these activities of the service department are instruments to raise the standard of the individual and make more efficient workers. Every dollar expended is considered an investment, which nets good returns in a more stable and efficient working force. The human factor is raised as is the mechanical factor. While good pay and working conditions are essential, they are not sufficient. Every factor that reacts on the mental and physical well-being of the worker is essential, too.

The practical business man will ask, Do these extensive activities, previously described, pay? Some manufacturers claim that while

they can see the benefits to be derived from such activities, the expense involved is out of all proportion to the return. The factory described runs its entire service department with a very few intelligent, capable, and conscientious workers, and though the expenditure in money is comparatively high, this factory, at any rate, considers that it is a good investment and that the returns to date fully justify it in continuing its elaborate service program.

MODEL CLOTHING-FACTORY BUILDINGS.

Many of the factories in which clothing is made consist only of lofts in tall buildings, which have no special adaptability for any line of manufacturing. Many of the larger lofts have insufficient daylight, unless they are the top lofts and have skylights.

IMPROVEMENTS IN FACTORY CONSTRUCTION.

During the last decade, and especially in the last five years, a number of admirably constructed clothing factories have been erected. There is perhaps no industry in the United States that has factories better designed and equipped than some of the modern clothing factories. Most of these newer factories have been planned after a careful study of all the features that have proved of benefit to the employees. Some are built in the suburbs, where land is cheaper than in the business sections of the cities. In the suburbs, greater space, more light, and much better ventilation can be obtained. Some of these factories in the suburbs are surrounded by trees and well-kept lawns, and the buildings are attractively designed, so that they look little like ordinary factories.

The progressive companies that have built these newer factories designed especially for the manufacture of clothing have become convinced that efficiency is promoted by comfortable and pleasant factory conditions. Accordingly, in constructing their new buildings, they have incorporated many improvements that make the surroundings of the workers far more agreeable than they were formerly. During this investigation it was found that the establishments that had erected these well-designed and well-equipped factory buildings are among those who do the largest amount of business and make the largest percentages of profit.

Following are brief descriptions of two modern clothing factories inspected by agents of the Bureau.

FACTORY A.

The well-being of the workers was given paramount consideration in planning the buildings of Factory A. The firm believes that better clothes can be made if employees are contented and happy. Consequently, this clothing concern has spared no expense to safeguard the health and happiness of the men and women workers in the construction of its new shops. It was not done to be philanthropic, but as a matter of sound business.

Architecture.—Domestic residential style characterizes the exterior architecture, and the effect is decidedly pleasing. Doorways are inviting, and above them are placed wrought-iron balconies, filled

with plants. An unusual feature is that the building covers less than one-half the site, and the rest of the property provides ample space for daylight to enter every part of the building.

Light.—Sunshine will travel 25 feet from a window into a room; based on this computation of the architect, the building is only 50 feet wide, making the center of every room 25 feet from a window. The building extends for 250 feet across the site, and another wing runs back from the center at right angles, giving the building the shape of a T. On both sides of the base or pillar of the T are lawns and foliage. Inside the building, large windows fill every wall, and the doors of the four fire escapes on each floor are of glass. Even on gloomy days there is no need of artificial light, as the walls are lined with glazed white tile, and light is reflected everywhere. Only on the darkest days and during the hours of late winter twilight is it necessary to use artificial light.

The system of artificial lighting is of the most modern electrical type. Special fixtures have been designed to prevent the eyestrain common among clothing makers.

Ventilation.—A modern ventilating system assures each employee of an abundance of fresh air. At both ends of each floor are placed two large ventilator shafts, which run upward to the roof, where they are capped with large hoods. These hoods are set on ball bearings and respond, like weather vanes, to the slightest breeze. The openings of each shaft are therefore facing the direction opposite to that from which the wind comes, the exhausted air rising and escaping unimpeded. A ventilator is placed at each window also, just below the sill, through which passes a supply of fresh air, which is warmed to a suitable temperature on entering the building. The air in the shops is renewed completely every 10 minutes, and is thus always fresh.

Cleanliness.—The walls are of glazed white tile, impervious to dirt and dampness, and are easily kept clean. The sweeping is done by a powerful vacuum cleaner. Sweepings and rubbish find their way to a garbage boiler, to be converted from waste products into fuel to produce the plant's hot-water supply. An additional help to keeping the workrooms neat is the system of steel chutes running to each floor, through which cloth cuttings and waste drop into fireproof boxes placed on the first floor.

Drinking water.—There is little chance for germs to exist in the drinking water, which circulates throughout the factory through bubble fountains. The water goes first through a filter, where all impurities are removed. From the filter it passes through a sterilizer equipped with a generator that sends 5,000 volts of electricity through every drop.

Commissary.—The shops are equipped with a modern commissary department. Food is chosen and cooked scientifically, under the direction of an expert, in the great kitchen, which is fitted with every modern appliance. The food is nourishing and makes for health and efficiency. It is sold at cost, and those who desire may also take home cooked food or provisions at actual wholesale cost.

Recreation and dining rooms.—An attractive recreation room is located just off the large dining room. It is 80 feet long by 42 feet

wide, and its windows are fitted with lace curtains; large rugs are spread on the floor. This room contains library tables, fitted with reading lamps, and provided with magazines in many languages—Polish, Bohemian, German, Scandinavian, and Italian—for the employees. These rooms are social centers for the workers and their families, and are used during free hours and in the evenings.

On special occasions the collapsible dining-room tables may be removed, allowing abundant room for community entertainments and dancing.

Hospital.—A cheerful, sunny room is the factory's hospital. A trained nurse is always on duty, ready to care for the sick or indisposed, and a physician is within easy call. All cases of illness or accident receive immediate attention.

Welfare.—A welfare department has been established with a separate corps of workers for the men and women. Their business is to look after the welfare of every employee, but their work is not limited to the four walls of the factory. They go into the homes of the workers as well, in cases of death, sickness, or trouble.

FACTORY B.

Factory B is located at a considerable distance from the manufacturing section of the city. It has no high buildings on any side to exclude air and light. The factory building is about 100 feet from the street and is surrounded by neat, well-kept lawns, inclosed by a handsome iron fence.

The building, which is erected around a court so as to insure abundance of light, is of steel and concrete construction, and is as nearly fireproof as possible. On the first floor are locker and recreation rooms, the hospital, restaurant, and kitchen, the power and heating plant, the shipping and freight room, and a storage room for waste material. The room for the storage of waste was designed to be absolutely fireproof, because most fires in clothing factories originate in the waste room.

The plant has its own machine shop, in charge of skilled machinists. The company claims that it could almost build its own machines and that all machinery is kept in perfect condition so as to insure the highest production.

The lighting in this factory is one of its finest features. Large windows extend from floor to ceiling, artificial light is furnished by large electric lamps, with reflectors, and each machine has an individual adjustable light.

The air is filtered through water, and is absolutely pure when it comes into the workrooms. In summer the air is cooled as it comes into the building and in winter it is warmed.

There are separate locker rooms for men and women. These rooms are large and contain rows of steel lockers, with ample space between, running from one end to the other. Each employee has a key to a private locker.

The large lunch room is neatly furnished and is provided with a piano. An inspection of the kitchen showed that everything possible was done to keep it clean. A satisfying lunch is served at the nominal charge of 15 cents. During the noon hour the doors to the workrooms are locked, so that employees are forced to take the necessary time to eat and rest. Before this rule was made, pieceworkers would take off only about 10 minutes, and would work the rest of the noon hour.

The factory hospital room is a picture of neatness. A trained nurse is always on duty during working hours.

In the rear of the building are a baseball field and tennis and croquet grounds for employees.

INEFFICIENT METHODS OF MANUFACTURING.

Efficiency has been defined as "the accomplishment of a task as well done as it is humanly possible to do it, with the least expenditure of time, effort, and money." [a]

In the clothing industry makeshift methods are still used to a great extent. Many manufacturers who in the past have been highly successful continue their old methods, firmly convinced that a change in policy would result in disaster. Such manufacturers may not be aware of the fact that their former success was not due to the use of now obsolete methods, but came about because many of their competitors were equally inefficient. This inefficiency of the trade in general was the reason why many of those who entered the business were successful.

The methods that were formerly successful in a small factory prove disastrous in many cases when applied to the larger factories of to-day. In many cases factories are now too large to be successfully managed by one individual. In the old days the owner was a tailor as well as a manufacturer. He knew his business, worked among his people, directed them with his superior knowledge, and maintained intimate relations with them; but the spirit of team work and cooperation were lost as the shop grew in size and the owner delegated to his superintendents and foremen the management of the labor force.

A new generation came into the business, in many cases the college-bred sons of old successful manufacturers. These young men were not tailors. They knew nothing about the manufacture of clothing. Their ideas, when they were at all fitted for business, were those of men of commerce. The factory could take care of itself. The foremen could run that. The all-important thing was the administrative end of the business, directing the salesmen, extending credit, etc. The result is what might have been expected. The commercial end of the clothing business to-day is usually competently handled, but generally speaking, the manufacturing side lacks efficiency.

The chief difficulty is to convince inefficient manufacturers that the old methods are out of date. The fact that a plant is large, the building modern, and the equipment the best that money can buy, and that high-salaried managers are employed, does not necessarily show that a factory is successfully conducted. The existence of the small contractor, who gets the most out of his humble facilities, who knows his job, and who successfully competes with the big inside shop, indicates that mere size and equipment mean nothing. Efficiency requires experimentation and study, going into all methods thoroughly and exhaustively, with the resulting standardization of the best possible method.

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[a] David Kirschbaum.

IMPROPERLY LAID OUT PLANTS.

As the small clothing firm expanded, the plant was usually enlarged without any definite plan. With the exception of a few of the largest houses, which built modern factories with their product in mind, most of the houses added space and equipment, without regard to changes in the character of the product or business. Consequently, many large plants to-day are constructed so as to make efficient management impossible.

A plant that is not properly laid out or that contains antiquated machinery increases the overhead cost and does not permit the capable worker to earn the pay to which he is entitled. The great majority of clothing plants are not laid out so as to insure the production of a unit in the least possible time. Most of the firms that have built their own plants have well-planned factories, but others are lacking in this most important detail. Their floor space is not adapted to the plant, but the plant is made to fit the building or loft, this being especially noticeable in New York City, where practically all the plants are rented.

The fitting of the factory to an inadequate building is especially unfortunate when the factory is located in a section of the city where rents are high. In the larger cities show rooms are necessary and they must be located where rents are high, but the cost of manufacture is greatly increased by having the factories in such sections. If the factories are separate from the showrooms and are located where the workers live, lower rents and buildings better adapted for manufacturing can be obtained.

The factories located in downtown districts usually have very poor lighting conditions. In many factories the artificial lighting is inadequate. All kinds of lights, from the large, glowing arc light to the incandescent light, are to be found. Inverted lights, or lights arranged so as not to cast shadows, are rare. In many factories the walls are not painted in colors that give the best lighting effects. In many factories the chairs, tables, and workboxes are not of the proper size or height to relieve fatigue; little if any attention is paid to the elimination of unnecessary noises, to the proper heating of irons for pressing various kinds of clothing, and the proper kind of shears to use for various operations. By many manufacturers these things are regarded as fads.

HANDWORK AND MACHINE WORK.

The wonderful development of the clothing industry in the past was due chiefly to the introduction of time and labor saving machines and devices. In the future any progress that the industry makes will be due to efficiency of management as well as to the more general use of improved machinery. Custom tailors in the past have employed mostly handwork. Their limited business and small establishments did not permit the installation of machinery other than a few sewing machines. Since the best clothing was formerly made by custom tailors, the opinion prevailed that good clothes had to be handmade. Many manufacturers have, therefore, been slow in investigating new labor-saving machines. In many cases the machine does even better

work than that performed by hand. A few of the larger houses, recognizing the cost-saving advantages of replacing handwork by machine work, have substituted basting and felling machines for the hand operations.

The substitution of machinery for handwork not only insures a uniform product but also permits a greater subdivision of labor. A great subdivision of handwork is not practical or profitable. With a greater subdivision of labor, operations can be made so minute that the employment of inexperienced help is profitable; and if such help can not be utilized, it is often necessary for the factory to remain in an otherwise unfavorable locality because of the presence there of skilled tailors.

Efficiency in the clothing industry is possible only where the manufacturer uses every machine that has proved capable of doing as good work as that performed by hand. The greatest efficiency will come about when machinery will have entirely superseded handwork.

Many manufacturers do not buy new machinery constantly coming on the market, though in a year the saving from the use of such machines would offset the initial cost. They continue to use old-type machines, which, while doing the work required, are not adapted to rapid production. Some manufacturers know practically nothing about machines, and when purchasing new machines leave the choice to the foremen. In the annual inventories of some manufacturers no account is taken of depreciation of machinery.

Of the 27 establishments from which reports regarding their sewing machines were obtained, only 13 stated that they had bought 100 per cent of the machines within 10 years, the general average of the machines bought within 10 years being 58.36 per cent. Table 39 shows the percentage of machines bought within the last 10 years in the 27 establishments that reported on this subject:

TABLE 39.—PERCENTAGE OF SEWING MACHINES BOUGHT WITHIN 10 YEARS.

Number of establishments reporting.	Machines used when establishments were in full operation.	Percentage purchased within last 10 years.	Number of establishments reporting.	Machines used when establishments were in full operation.	Percentage purchased within last 10 years.
13	878	100	1	30	25
1	36	90	4	246	20
1	30	85	1	600	10
2	247	75			
2	1,420	70	Total (27 establishments)	4,335	58.36
1	98	49			
1	750	33.33			

All sorts of motor arrangements are found in clothing manufacturing plants, from individual motors to one large motor for the entire plant. Few manufacturers have studied the seasonal fluctuations of their business sufficiently to determine an efficient arrangement of machines per motor that will eliminate waste of power, not only in dull seasons but also when only one section, or part of a section, is working overtime.

SHRINKING CLOTH.

It has often been stated that a standard rule to cover the loss through shrinkage can not be formulated, because goods of different character, weight, and construction, and even similar goods under different conditions, shrink differently. This is the excuse given by many manufacturers who take no account of shrinkage except the slight cost of the process, in reckoning the total cost of a garment. Some manufacturers who include their shrinkage, measure their goods before they are shrunk. At the beginning of a season they lay out the pattern of a new sample on unshrunk goods, and the yardage then recorded is calculated to be the average used in a suit or coat. As previously stated, the same goods will shrink differently under different conditions, especially if they are steam-shrunk on one occasion and London-shrunk on another. This method, then, while it takes care of the shrinking, does not do so accurately or satisfactorily.

With the conditions described, there is apparently only one way to take accurate account of the shrinking. The yardage used in a suit or coat varying with each piece of goods, the only proper way is to reckon the shrinkage of each piece of goods. By the following formula the cost per yard of shrunk cloth may be correctly ascertained:

$$\frac{\text{Number of yards before shrunk} \times \text{net price per yard} + \text{cost of shrinking}}{\text{Number of yards after shrinking}} = \text{Net cost per yard of shrunk cloth used.}$$

Assuming that a piece of goods measures 50 yards before it is shrunk and 48 yards after shrinking, that the net price per yard is $1 and the cost of shrinking is $0.50, we have:

$$\text{Net cost per yard of shrunk cloth used} = \frac{50 \times \$1 + \$0.50}{48} = \$1.05.$$

Measuring the goods whenever a style is cut, and multiplying the yardage by the net cost per yard of shrunk cloth used, gives the actual cost of the cloth in any particular style of suit. Such a method, though accurate, requires constant calculating of yardages used, but many manufacturers consider that averages are good enough. Even a study of averages based on a sufficient number of calculations with the foregoing formula would be of some value, especially for those who at present pay little or no attention to losses from shrinkage.

INVENTORIES.

Few houses keep a perpetual inventory of materials. One big house claimed it had formerly used such an inventory but had discarded it as not being worth the time and expense required to keep it. Most manufacturers take an inventory only once a year, and often this is done very carelessly. A few take semiannual inventories, and a very few have a system whereby the supply of every kind of cloth or trimming or of every style of made-up goods can be ascertained at a moment's notice. Very few require cutters to deduct the yardage cut from the original yardage marked on the piece-goods tickets, so that at a glance the remaining yardage may be known.

As to the price per yard in calculating the inventory, all sorts of variations appear. Some manufacturers will calculate the value of their goods at market price, others at net cost price, others at net cost price less a fixed depreciation, and still others at net cost price less a percentage of depreciation based on what they consider the goods will be worth the following season.

While most clothing manufacturers charge interest on the capital invested, they rarely charge interest on goods, raw and finished, that have been paid for and that remain on shelves or racks for months.

False economy is responsible in many instances for an inferior product. A manufacturer will throw away 50 cents per unit by inefficiency in his factory and try to make it up by having cloth steam-shrunk instead of London-shrunk, by not shrinking the tapes, linings, etc., by substituting inferior canvas, tapes, etc.—practices that result in deterioration of the product and eventually in loss of business.

THE CUTTING ROOM.

One of the chief causes of underproduction in the cutting room is the lack in many cases of an adequate system of grouping orders so as to permit the greatest bulk cutting. This statement does not apply to the houses that manufacture the best grade of clothing, where the suits are cut one or two at a time.

In many factories cutters work where the daylight is insufficient and the artificial lighting conditions are poor. Artificial light is bad enough, but doubly so when the lighting conditions are inadequate. Often the lights are directly overhead and cast shadows which cause eyestrain. In many factories the floors are not smooth enough for easy walking. In some the cutters walking around the tables strike the table legs, which are not set in far enough. These annoyances interrupt work, lessen the cutter's stamina and endurrance, and decrease production.

To one who has witnessed the great amount of time wasted by cutters in many factories trying to locate a particular pattern from hundreds hung promiscuously on the wall, the need is evident for some system by means of which particular patterns may be easily located. Not only does the cutter waste valuable time, but his annoyance when he is unable to locate the desired pattern reacts unfavorably on his subsequent work.

No doubt the greatest waste of time and effort of the skilled, highly paid cutter is the shifting around of the pattern so as to secure the best possible lay. In most houses the marker, or cutter, figures out his lay every time a style is to be cut. The fact that he marks the same pattern many times a season does not help much, for he has such a variety of patterns that the same style recurring at different intervals rarely gives him the opportunity of firmly fixing in mind the proper place on the lay for each pattern. This waste of time could be saved if at the beginning of the season, after the designer or head cutter had experimented with all the styles for the season, there were drawn a perfect lay plan for each style.

The cutters could be given copies of the plan for their guidance, and they could make the best arrangement of patterns without loss of time by looking at the model instead of experimenting by shifting the patterns around.

Such a scheme would save not only time but cloth as well, and the whole saving during a season would be large. The manufacturer who calculates accurately the yardage in a particular suit does so on the basis of the patterns being most economically placed on the lay. Different cutters, however, usually require yardages to cut an order if they are permitted to use their own judgment. In view of the fact that a cutter's ability is generally judged by the amount of goods cut, and that the manufacturer seldom investigates or employs a system whereby only the yardage allowed is cut, the cutters in the rush of trying to turn out a day's work often use more goods than is necessary.

In cutting trimmings there is great waste of material and labor. In the old days whole pieces of lining and other trimmings were sent to the contractor, according to the manufacturer's estimate of what was required for the work in hand. This carelessness as to trimmings still exists, probably because of their relatively low value. Trimmings can be cut as exactly as the cloth, but the great majority of establishments cut trimmings to allow for further cutting in the factory. This method not only is a waste of material, but necessitates the employment of a fitter. If the trimmings were cut exactly, the extra material would be saved, the services of the fitter could be dispensed with, and much of the cutting in the various operations would be saved. This inexact cutting of trimmings is probably due to the employment of inexperienced cutters, usually apprentices. It is another case of false economy, based on the manufacturer's idea that he can not afford to pay as much for cutting the trimmings as he can for cutting the cloth. He does not consider that this saving in the wages of the cutter is more than counterbalanced by the extra cost of trimmings, the wages of the fitter, and the extra time required to turn out a unit.

The chalk required to mark a lay must have a fine edge, and the cutter sharpens chalk many times a day. Cutters are paid by the week and their wages are among the highest in a clothing factory. The loss occasioned by the cutters sharpening chalk is considerable during a season. One resourceful New York manufacturer has invented a device for sharpening chalk, operated by a small boy, which not only saves the time of the cutters but makes a better edge and saves much of the chalk as well.

ROUTING.

The plant should be laid out so that the raw material brought into the building enters the storeroom. Next in order should come the cutting department, trimming department, manufacturing department, stock department, and finally the shipping department. The storeroom and shipping room should be located at the freight elevators. The usual plant has no such arrangement. Frequently the cutting department is located where the stock department ought to be, the stock department where the manufacturing department ought to be, etc. Within the various departments all sorts of inefficient

arrangements prevail, sometimes due to poor management and sometimes to the unfitness of the building for the manufacturing of clothing.

Routing is a basic factor of manufacturing success. In most factories there is no calculated efficient production for the factory, nor a balance of production between departments and sections. The goods, instead of continuing in one direction are constantly traveling back and forth, because the route is not properly laid out and the work is not examined after each operation. The success of a routing system depends not only upon the arrangement of the factory but also upon the scheduling of the work from a central planning office, such a schedule providing for the completion of a certain unit of work in a specified time.

In one establishment an agent of the Bureau noticed that a coat was carried across the factory from operation No. 4 to operation No. 5, and then back across the floor again to operation No. 6. The reason for this extensive traveling was that operation No. 5 required exceptionally good light while operations No. 4 and No. 6 did not. The workers on operation No. 5 required a window, and as the windows of this plant were on one side, the coat had to make a round trip of about 100 yards. In this case, the waste of time was due to the unsuitability of the building, but in many cases such roundabout routing in factory operations is due to the manufacturer's ignorance of the principles involved in laying out a plant scientifically.

This discontinuous order of operations results not only in much waste of time but in other serious disturbances. The floor boy who carries the work often stops to talk, distracting the attention of the operators, and his constant moving about causes the parts of the garments to get mixed in transit, with the result that frequently orders that should be turned out promptly are delayed.

The number of manufacturers who have studied the time necessary for completing a garment is small, and the ordinary manufacturer when given an order can not tell definitely when it will be ready for shipment. With a very few exceptions, an efficient system that would permit a regular service, and a rush service for specials on hurry-up orders, is not to be found in the industry. Usually the attempt to rush an order results in the remaining orders being delayed unduly long. A control board, such as the one described in the section on "The efficient factory," by means of which the flow of work in the factory can be regulated, is rarely found. As for a routing diagram, a chart for the routing of work mapped out in advance, most manufacturers have never even heard of it.

If the clothing manufacturer managed a railroad or street railway he would appreciate the vital importance of a routing system, but in many cases he does not seem to realize that turning out an order of clothing without a clearly defined routing schedule takes several days or weeks longer than is necessary. The installation of a proper routing system would result in great economies not only in lowering costs but in preventing cancellations due to late deliveries. The really capable clothing manufacturer now realizes that he must have a factory in which the physical conditions and arrangement are perfect, combined with a routing schedule in accord with that arrangement.

TRAINING OF HELP AND METHOD OF WORK.

In contrast to other large industries, the clothing trade has no system of industrial training. When a tailor is employed, the only question generally asked is where he has worked last. Usually no examination of the applicant is made, the manufacturer he last worked for is rarely referred to, and after he is engaged little attention is paid to training him for the kind of work for which he is best adapted. Along with this lack of system goes the driving of workers, the only way of speeding up with which the ordinary manufacturer is acquainted. It is easy to engage those who claim to be experienced tailors. To train them requires ability, energy, time, and money. The following is quoted from an article in the Saturday Evening Post of May 15, 1915:

"It is cheaper to experiment with office boys, shop boys, and beginners than with sales managers," a well-known efficiency expert declared recently. "The man who hires his cheapest help with as much care as he would use in selecting a department head or a general manager will generally find it unnecessary to pay a high premium to dislodge a big man from the top of a competitor's organization. Every man or boy who is hired to work with his hands should be considered with a view to the fact that he holds promise of being able to work with his head. Hire the right kind of office boys, stock boys, messengers, and helpers and you will establish an almost automatic supply of good salesmen, superintendents, and executives.

"Pick your shop boys as carefully and as intelligently as you would select a high-priced superintendent, and you will ultimately find that, as a general rule, you will not have to go outside your own organization for competent men with whom to fill your positions that command salaries instead of wages. You will, in short, command your own source of supply for all the higher positions in your organization. This takes time, vigilance, and intelligence, and it can not be done in a month or a year; but it is the only solid and permanent basis on which to build. I have seen it worked out to convincing conclusions in scores of cases."

After the workers have been carefully selected, a system of training will enable them to utilize their natural capacities in the most productive way, especially if the training includes such indirect but powerful influences as the stimulation of ambition and the general development of character. Employees should be more or less permanent, for under the present system, by which tailors rarely work in the same shop two seasons, the worker can not, even though he tries, produce his best. The manufacturer must plan his business so as to make employment steady enough to hold a permanent well-trained labor force.

Well-trained workers do not need urging to take an interest in the business or in their work. They realize that the owner's interests and theirs are compatible and mutual. A force of such workers would easily see the fallacy of the statement that increased production necessarily means less work per employee.

The larger the factory the greater the dependence upon the labor that makes the factory possible. The large manufacturer will find the highest success only with a system of training and fair treatment for his employees, because the worker's best efforts are exerted when he gives his energy voluntarily and when he is contented. The best results are obtained when there exists between employer and employee a spirit of cooperation and mutual respect.

Manufacturers who contemplate training employees should utilize raw and not experienced help. Experienced tailors can not outgrow their old faults nor can they adapt themselves to the new order of things. Furthermore, having learned their trades under masters of

different skill and ideas, they can not, as a group, turn out a uniform product. Raw help is more alert and adaptable. Having no previous settled ideas of how to do a thing nor fixed ways of doing it, they learn the proper method easily and quickly.

The skilled tailor can do but one thing. A worker should not be trained for one operation only, but, starting with the easiest, should be trained gradually in each succeeding, more difficult, operation. This method not only produces a well-balanced worker but provides an opportunity for promotion and better pay, to which the skilled tailor can not look forward. The tailor's wages depend upon the amount of work, not the kind of work. The well-balanced, trained factory employee can be shifted about from one operation to another as necessity demands. A worker, provided he is of the proper timber, need not be discharged because he is unsuited to certain operations, but can be tried on all operations until the one for which he is best suited is discovered.

The greatest benefit derived from training help is that it breaks up the dependence upon the skilled tailor. It enables the manufacturer to obtain better help, gives him a wider field for selection, and enables him to establish his factory in any locality of whose natural and special advantages he wishes to avail himself. Other benefits are increase of output, decrease in cost of production, and therefore better paid and better satisfied workers, and better quality and greater uniformity in the product.

In a proper system of training help the greatest difficulty will come in convincing the worker that the training is for his best interest. Manufacturers must cease the general practice of doing things simply because other manufacturers do them. A system of training help that would be correct for one plant would be incorrect for another. Each manufacturer must work out a system adapted to his own needs. Welfare work, now generally lacking, should be introduced, not as a philanthropy but as an investment that will yield profitable returns.

By the old method, still employed by some manufacturers, the entire plant is made up of units of workers in groups, seldom very large, each group producing a certain number of garments and working independently of the others. The divisions of labor are not very great, one worker often making an entire part.

The scientific modern method is to consider all the employees of the factory a single unit. The making of the garment is then divided into a great number of minute operations, each of which certain workers are trained to perform. The operations are not to be performed as the workers think best, but the manufacturer, after diligent study and experiment, determines the best methods, which are then standardized. Through written rules and physical demonstrations the workers are taught the standard method for each operation by a corps of expert instructors, who can be utilized as examiners or on other work when time permits.

With the standardization of operations, there should be time and motion studies, which, except in a very few instances, have not been made in the clothing industry. It is, however, not advisable to undertake such studies until the factory is well organized in all other details. The purpose of these studies should be to increase produc-

tion and the opportunity for earnings. In a well-managed factory high wages usually indicate a low percentage of labor cost and a high percentage of profit. If the employees suspect that the object is to lower wages, the time studies become valueless, because the time determined as a standard for a particular operation would be largely affected by the employees' dissatisfaction. The accuracy and value of these studies depend on the employees doing their utmost in cooperating with the management.

THE OFFICE.

In the office of many clothing factories no reliable and permanent records are immediately accessible. Valuable letters are destroyed or can not be found. When incoming letters and copies of outgoing letters are kept, no adequate numbering or indexing system is employed, and a reference to a letter of the previous month generally requires a long search. The use of stamped envelopes is infrequent, and it is a usual sight in a large establishment to see the bookkeeper or stenographer spending the hour from 5 p. m. to 6 p. m., or, at the end of the month when bills and statements are being sent out, the greater part of the day, pasting stamps on envelopes. The telephone is used for every occasion, the cost per call being so small that the total cost is lost sight of. Often goods for future delivery are ordered by telephone when a post card would suffice. There are no printed forms for use on different occasions to facilitate correspondence, such as an acknowledgment of an order, an answer to an inquiry as to date of shipment, etc., but each inquiry or incoming letter requires a typewritten reply. Expensive embossed or engraved stationery is often used for continuation sheets.

The usual office does not have proper equipment for efficient management. Dictaphones, adding machines, and computing machines are rare. Stenographers waste time in sharpening pencils which could be pointed more quickly and better by a machine.

In many cases the idea that cheap work is economical is responsible for the employment of an office force unfit for the work. This short-sighted policy often leads to the hiring of young business-school graduates, who are expected to do at once the full work of experienced clerks. The new bookkeeper or stenographer is left to grope and do the best of which his theoretical training or limited experience makes him capable.

Inadequate cost-finding systems are discussed in a chapter of this report headed "Cost finding and accounting conditions."

CHAPTER V.

WORKING CONDITIONS.

CHANGES IN LABOR CONDITIONS.

In the early days, when the industry was small, the operating was done largely in the homes of the workers, chiefly Germans, under conditions of their own choosing; that is, so far as they related to the conditions in their own homes. Following this period, and during the time that the contract system was developing, labor conditions were at their worst. The sweat shop, task system, charges for supplies and power, dark and poorly ventilated rooms with little or no protection from fire, long hours, and low wages were some of the evils that existed.

Partly through the demands of labor and partly through the action of the manufacturers and of the public, laws were passed in the various States which did away with or greatly lessened these evils in the industry.

Conditions were improved not only through legislative action, but by agreements between the unions and manufacturers' associations or between the unions and manufacturers acting independently of associations. Such associations and manufacturers assumed the position that their products would be better made and their output greater if the conditions surrounding the workers were such as would cause few or no complaints.

Many manufacturers who believe in looking after the welfare of their employees have not raised their standards to ideal conditions, because other manufacturers, particularly those known in the trade as "pirates," keep their standards low. They consider only immediate profits and not the establishment of a permanent business. These "pirates" usually operate only in good years; when there is a period of depression in the industry they suspend operations until a more favorable time. They thus reap the benefits from good years and suffer no losses in the bad years, whereas the regular manufacturer has to take the bad years with the good, and for this reason sometimes hesitates to make the investments necessary to make improvements in which he believes.

Sweat shops and the task system have been practically eliminated, the number of contract shops has been reduced, shorter hours without a reduction in wages have been granted to employees, and sanitary conditions in the shops of the manufacturers and in the homes of the employees have been greatly improved. Labor enjoys more privileges, better wages, and shorter hours than formerly, and the clothing trade no longer deserves to be called a "sweated" industry.

PIECEWORK AND TIME-WORK.

In the old days, when shops were small, the owner was acquainted with his help, and when manufacturing stock was the rule, time-work was the usual basis for direct labor payment. With the advent of the big shop, in the hiring of whose hundreds of employees knowledge of the worker's ability was unknown, and with manufacturing for orders superseding manufacture of stock, the great subdivision of labor displaced the skilled tailor, and piecework largely supplanted time-work.

Manufacturers generally prefer piecework, for several reasons. It eliminates discrimination and favoritism, saves constant supervision and driving of the workers, and weeds out the inefficient workers. It encourages workers to greater production, which lessens the percentage of overhead expense. It fixes in advance the direct-labor cost of units, which under a time-rate system could be ascertained only after time studies involving expense.

The skilled, capable worker usually prefers piecework, as it enables him to take the greatest possible advantage of his skill. The mediocre, unskilled, slow worker prefers, as is to be expected, the time-rate system. The trade union prefers the time-rate system for two reasons: First, because the union seeks the benefit of the mass of workers and not of the individual highly skilled worker, and secondly, to protect the worker against himself. Jews and Italians are the great majority of workers in the clothing trade. Both are tireless, unceasing workers, if they can thereby increase their earnings. The piece-price system gives these workers the incentive to work long hours, on holidays, etc., beyond the limits of healthy endeavor. To remedy this evil the union favors the time-work system.

It is generally admitted that better work is obtained if the employees are on time-work. Certain manufacturers prefer time-work on their better grades of garments, especially coats, although they may be in favor of piecework on grades that do not require the finest workmanship. The chief argument against piecework is that it tends to the "speeding up" of the employees, which sacrifices quality to quantity.

Examining and sponging the cloth, cutting and trimming the garments, examining, cleaning, and brushing the finished product, and busheling are generally on a time basis, while operating, basting, and pressing are generally on a piece basis. The general tendency is toward piecework for all occupations which do not require too much attention on the part of the employees and of which the unit of measure can be readily determined.

All manufacturers were in accord in stating that wages had increased in the last few years, but varied in their opinions as to the amount of increase and whether or not the relative increase was the same in different localities.

Table 40 gives, by establishments, the number of employees by age and sex who are doing time and piece work. Data are given for only two groups, representing the extremes in the method of operating—that is, Group I, establishments having no operating contracted, and Group III, establishments having all operating contracted.

The establishments having given numbers in this table are not the same as those with the same numbers in previous tables; the numbers were shifted to preclude the possibility of identification of individual concerns.

TABLE 40.—NUMBER OF EMPLOYEES ENGAGED IN DIRECT AND INDIRECT LABOR, BY AGE, SEX, AND TIME AND PIECE WORKERS, BY INDIVIDUAL ESTABLISHMENTS.

[Each line gives the figures for a separate establishment.]

GROUP I.—NO OPERATING CONTRACTED (12 ESTABLISHMENTS).

Establishment.	16 years of age and over.						Under 16 years of age.				All employees of both sexes.		
	Male.			Female.			Male.[a]	Female.					
	Time.	Piece.	Total.	Time.	Piece.	Total.	Time.	Time.	Piece.	Total.	Time.	Piece.	Total.
No. 1	136	273	409	246	492	738	8	12	.....	12	402	765	1,167
No. 2	210	169	379	125	481	606	4	19	6	25	358	656	1,014
No. 3	160	256	416	151	340	491	2	5	.....	5	318	596	914
No. 4	230	365	595	65	152	217	.....	.....	.....	.....	295	517	812
No. 5	110	210	320	67	100	167	.....	.....	.....	.....	177	310	487
No. 6	40	170	210	97	92	189	2	1	.....	1	140	262	402
No. 7	60	125	185	15	76	91	.....	.....	.....	.....	75	201	276
No. 8	46	84	130	45	64	109	2	1	.....	1	94	148	242
No. 9	5	95	100	5	95	100	.....	.....	.....	.....	10	190	200
No. 10	90	20	110	37	17	54	2	12	.....	12	141	37	178
No. 11	63	45	108	17	10	27	.....	.....	.....	.....	80	55	135
No. 12	16	2	18	9	48	57	.....	.....	.....	.....	25	50	75
Total	1,166	1,814	2,980	879	1,967	2,846	20	50	6	56	2,115	3,787	5,902

GROUP III.—ALL OPERATING CONTRACTED (20 ESTABLISHMENTS[b]).

Establishment.	16 years of age and over.[c]						All employees of both sexes.		
	Male.			Female.					
	Time.	Piece.	Total.	Time.	Piece.	Total.	Time.	Piece.	Total.
No. 1	300	.....	300	50	.....	50	350	.....	350
No. 2	276	.....	276	49	.....	49	325	.....	325
No. 3	120	.....	120	40	.....	40	160	.....	160
No. 4	20	60	80	16	4	20	36	64	100
No. 5	85	.....	85	12	.....	12	97	.....	97
No. 6	63	3	66	6	16	22	69	19	88
No. 7	50	.....	50	10	.....	10	60	.....	60
No. 8	35	.....	35	8	.....	8	43	.....	43
No. 9	31	.....	31	5	.....	5	36	.....	36
No. 10	30	.....	30	5	.....	5	35	.....	35
No. 11	30	.....	30	4	.....	4	34	.....	34
No. 12	25	.....	25	3	.....	3	28	.....	28
No. 13	18	.....	18	4	.....	4	22	.....	22
No. 14	12	.....	12	5	.....	5	17	.....	17
No. 15	14	.....	14	2	.....	2	16	.....	16
No. 16	11	.....	11	4	.....	4	15	.....	15
No. 17	10	.....	10	3	.....	3	13	.....	13
No. 18	11	.....	11	.....	.....	.....	11	.....	11
No. 19	7	.....	7	3	.....	3	10	.....	10
No. 20	6	.....	6	2	.....	2	8	.....	8
Total	1,154	63	1,217	231	20	251	1,385	83	1,468

[a] No pieceworkers.
[b] No data reported for 2 establishments.
[c] No employees under 16 years of age.

Group III reported no employees under 16 years of age and Group I reported 76 under the age of 16 years out of a total of 5,902 employees; in other words, those under 16 years of age were less than 1½ per cent of the total number of employees. Of the 76 under the age of 16 years, 20 were males and 56 females, and all were time-workers with the exception of 6 reported by one establishment. The number of pieceworkers in Group III was 63 males and 20 females, of whom 3 males and 16 females were employed by one establishment and 60 males and 4 females by another.

The employees under 16 years of age are usually found in such minor positions as errand boys or girls, label pasters, etc., but they are sometimes learners in the more important occupations. In many States laws have been enacted establishing a minimum age at which one can be employed, and it is only through a certificate obtained from some public or school official that a person under the required age is permitted to work.

Another marked contrast between these two groups is the sex of the employees. In Group I, the the employees are nearly equally divided between males and females, while in Group III males predominate, being over 82 per cent of the total number of employees reported.

There is also a marked difference in the manner of payment of wages. In Group I the piece rate predominates, but in Group III practically all the employees are on a time basis. In Group III the number employed is confined largely to the cutting room, where the time rate prevails, not only in establishments having all operating contracted but in establishments having no operating contracted; whereas in Group I the greatest number employed is found in the sewing and pressing departments, where the piece rate prevails.

For the 12 establishments having no operating contracted, there were reported 5,826 employees 16 years of age and over, of which number 2,980 were males and 2,846 were females. It will be noted that piece rate is more common among the females than the males, owing to the fact that many male workers are found in the cutting room, where few women are employed and where the time rate prevails.

The employees under 16 years of age were confined almost entirely to 3 establishments, which reported 63 out of a total of 76. Establishment No. 2, with 29, showed the largest number of such employees, though it was less than 3 per cent of its total employees.

The average number of employees per establishment was 492 for Group I and 73 for Group III.

EARNINGS AND HOURS OF LABOR.

The tables and other data in this chapter were taken from a report made by the Bureau of Labor Statistics, Department of Labor, on wages and hours of labor in the clothing industry during the years 1911, 1912, and 1913.[a]

The material for this report was obtained from establishments making men's outer garments—coats, pants, vests, and overcoats—for the trade; or, in other words, what is commonly known as men's ready-made clothing. Special-order and merchant-tailor firms are not included. All grades of ready-made men's clothing from cheap to high grade are covered in the figures presented.

[a] Bulletin of the United States Bureau of Labor Statistics, Whole No. 161.

The information for this report was secured by agents of the Bureau from the pay rolls and time books of the establishments visited. The data are for one pay-roll period in each year, generally a pay period in July or August. With few exceptions, the pay period covered one week. Data were obtained both from clothing manufacturing establishments and from contractors.

In this report are shown the prevailing full-time weekly earnings, full-time hours of labor per week, and rates of wages (or earnings) per hour of employees in the principal occupations in the manufacture of men's factory-made clothing in the United States. The information herein contained was furnished by representative establishments in the leading clothing-manufacturing cities. Figures are given for the years 1912 and 1913.

The Bureau could not undertake to collect data from all establishments in the country. In selecting the representative establishments from which to collect data, the Bureau sought to represent the cities of the greatest importance in the industry, the measure of importance being the number of employees in this particular industry. The table which follows shows the leading cities in the manufacture of men's clothing, the number of employees in the industry in each city in 1910 as determined by the United States Census Office, the number of establishments and shops from which data were collected in 1913, the total number of employees on the pay rolls of such shops, and the number of employees for whom data were taken and shown in this report.

TABLE 41.—TOTAL NUMBER OF EMPLOYEES IN MEN'S CLOTHING MANUFACTURING AND NUMBER OF EMPLOYEES IN ESTABLISHMENTS FOR WHICH DATA ARE SHOWN FOR 1913.

City.	Number of employees reported by United States Census Office, 1910.	Establishments for which data are shown by the Bureau of Labor Statistics for 1913.			
		Number of establishments.	Number of separate shops.	Number of employees—	
				On pay roll.	For whom data are shown.
New York	61,275	63	89	6,450	5,359
Chicago	32,890	6	34	7,303	5,797
Baltimore	15,090	3	16	2,885	2,349
Philadelphia	8,233	14	28	2,129	1,752
Rochester	7,732	5	15	2,081	1,564
Cincinnati	4,769	22	27	1,270	952
Boston	4,292	4	12	648	424
St. Louis	2,614	.....	.....	.....	.....
Cleveland	2,560	.....	.....	.....	.....
Milwaukee	2,639	.....	.....	.....	.....
Detroit	2,740	.....	.....	.....	.....
Other cities	46,349	.....	.....	.....	.....
Total	191,183	117	221	22,766	18,197

Men's factory-made clothing is made almost exclusively in large cities. The table shows 191,183 persons employed in this industry in 1910. Of this number 134,281, or 70.2 per cent, were employed in the 7 cities in which data were collected. Other cities in which this industry is of importance are named in the table. Because of the limited resources of the Bureau the inquiry has been limited to representative cities and representative establishments. Data are presented in this bulletin for 18,197 employees in 1913, or 9.5 per cent of the total number of employees in the industry in the United States in 1910.

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913.

BASTERS, COAT: FEMALE.

[The figures for 1912 and 1913 are for identical establishments, hence all figures for 1913 are directly comparable with those for 1912.]

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	3	218	58.2	$0.1352	16	6	16	9	40	42	37	25	8	9	6	4
Boston	4	21	54.0	.1273	...	...	2	2	7	5	3	...	...	2	...	...
Chicago	5	342	54.0	.1996	1	2	3	14	13	22	33	40	42	108	43	21
Cincinnati	7	51	53.8	.1517	...	1	...	5	1	9	16	13	5	...	1	...
New York	21	104	57.0	.1306	...	4	9	6	29	20	12	13	4	6	1	...
Philadelphia	7	50	54.4	.1379	3	...	3	6	9	8	6	5	3	6	1	...
Rochester	3	53	54.8	.1921	...	1	...	1	3	3	7	10	6	15	5	2
Total	50	839	55.5	.1654	20	14	33	43	102	109	114	106	68	146	57	27
1913.																
Baltimore	3	243	53.0	.1346	...	7	10	26	64	50	32	25	10	17	2	...
Boston	4	8	50.0	.1606	...	...	...	...	...	2	1	2	3	...	...	...
Chicago	5	333	52.0	.2254	...	...	...	1	10	17	27	35	39	86	75	43
Cincinnati	7	55	50.9	.1783	...	...	...	...	4	4	7	13	11	11	5	...
New York	21	100	52.3	.1564	...	...	2	9	15	21	14	6	7	22	4	...
Philadelphia	7	94	53.9	.1641	1	1	...	8	11	10	17	17	9	11	9	...
Rochester	3	91	52.0	.2239	...	...	...	1	3	8	9	8	13	16	14	19
Total	50	924	52.4	.1843	1	8	12	45	107	112	107	106	92	163	109	62

BASTERS, PANTS: FEMALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	2	17	55.0	$0.1168	...	...	5	4	3	2	1	1	...	1	...	...
Boston	2	5	54.0	.1885	...	...	...	...	2	...	...	...	1	...	2	...
Chicago	3	107	54.0	.1880	1	1	1	2	9	11	16	12	12	25	13	4
New York	9	40	56.9	.1573	...	1	...	2	9	7	8	2	5	4	...	2
Philadelphia	4	14	54.3	.1025	...	2	3	2	3	3	1	...	...	...	...	...
Total	20	183	54.8	.1682	1	4	9	10	26	23	26	15	18	30	15	6
1913.																
Baltimore	2	5	53.4	.1632	...	...	...	...	1	1	1	...	1	1	...	...
Boston	2	4	50.0	.2137	...	...	...	...	...	...	...	...	1	3	...	...
Chicago	3	50	52.0	.1699	...	...	1	...	7	9	8	5	5	10	5	...
New York	9	51	53.1	.1684	...	1	...	1	7	6	14	6	7	3	6	...
Philadelphia	4	17	53.6	.1365	...	...	1	1	1	7	3	2	2	...	...	...
Total	20	127	52.7	.1659	...	1	2	2	16	23	26	13	16	17	11	...

BASTERS, VEST: FEMALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	2	28	58.2	$0.1087	3	2	3	3	10	3	1	2	...	1	...	...
Chicago	3	118	54.0	.2216	...	...	...	1	7	9	9	9	9	30	32	12
New York	16	99	56.6	.1605	1	2	6	2	12	20	12	8	9	23	1	3
Philadelphia	5	29	54.6	.1879	...	...	...	...	...	1	3	8	7	10	...	...
Total	26	274	55.4	.1845	4	4	9	6	29	33	25	27	25	64	33	15
1913.																
Baltimore	2	24	54.3	.1409	...	1	...	1	6	7	3	4	...	1	...	1
Chicago	3	64	52.0	.2385	...	1	...	...	...	3	5	3	4	21	17	10
New York	16	90	53.1	.1943	...	1	...	1	10	10	13	8	10	18	13	6
Philadelphia	5	29	53.5	.2110	...	...	...	1	1	...	...	2	2	21	2	...
Total	26	207	52.9	.2041	...	3	...	3	17	20	21	17	16	61	32	17

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913—Continued.

BASTERS, ALL: FEMALE.[a]

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	3	263	58.0	$0.1312	19	8	24	16	53	47	39	28	8	11	6	4
Boston	4	26	54.0	.1390	...	...	2	2	9	5	3	...	1	2	2	...
Chicago	6	567	54.0	.2020	2	3	4	17	29	42	58	61	63	163	88	37
Cincinnati	7	51	53.8	.1517	...	1	...	5	1	9	16	13	5	...	1	...
New York	37	243	56.8	.1472	1	7	15	10	50	47	32	23	18	33	2	5
Philadelphia	13	93	54.4	.1481	3	2	6	8	12	12	10	13	10	16	1	...
Rochester	3	53	54.8	.1921	...	1	...	1	3	3	7	10	6	15	5	2
Total	73	1,296	55.4	.1698	25	22	51	59	157	165	165	148	111	240	105	48
1913.																
Baltimore	3	272	53.1	.1357	...	8	10	27	71	58	36	29	11	19	2	1
Boston	4	12	50.0	.1783	...	...	...	...	...	2	1	2	4	3	...	...
Chicago	6	447	52.0	.2210	...	1	1	1	17	29	40	43	48	117	97	53
Cincinnati	7	55	50.9	.1783	...	...	...	...	...	4	4	7	13	11	11	5
New York	37	241	52.8	.1731	...	2	2	11	32	37	41	20	24	43	23	6
Philadelphia	13	140	53.8	.1704	1	1	1	10	13	17	20	21	13	32	11	...
Rochester	3	91	52.0	.2239	...	...	...	1	3	8	9	8	13	16	14	19
Total	73	1,258	52.5	.1857	1	12	14	50	140	155	154	136	124	241	152	79

HAND SEWERS, COAT: FEMALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	3	303	58.2	$0.1332	15	13	21	17	58	55	48	32	22	20	2	...
Boston	4	47	52.9	.1522	...	2	1	1	10	8	8	5	4	5	3	...
Chicago	5	1,017	54.0	.1740	10	7	9	55	106	107	151	147	130	194	79	22
Cincinnati	9	216	53.4	.1450	9	4	6	10	21	60	35	38	11	18	4	...
New York	25	821	56.6	.1361	18	32	64	59	181	140	125	81	37	63	16	5
Philadelphia	7	246	54.3	.1337	8	10	12	21	54	49	32	29	13	15	3	...
Rochester	3	238	54.6	.1695	1	1	2	10	28	35	33	37	29	43	16	3
Total	56	2,888	55.2	.1526	61	69	115	173	458	454	432	369	246	358	123	30
1913.																
Baltimore	3	255	53.6	.1608	1	3	3	15	29	38	48	36	33	41	8	...
Boston	4	98	50.0	.1649	...	...	...	1	5	17	26	18	9	19	3	...
Chicago	5	845	52.0	.1924	...	1	3	15	62	95	105	105	133	191	80	55
Cincinnati	9	210	50.5	.1604	3	2	7	3	10	34	58	30	30	22	5	6
New York	25	852	52.0	.1697	3	6	14	32	91	141	135	140	61	139	64	26
Philadelphia	7	245	53.1	.1748	1	3	8	18	37	40	40	33	19	29	9	8
Rochester	3	274	52.0	.1926	1	1	...	4	18	34	41	29	38	69	22	17
Total	56	2,779	52.1	.1776	9	16	35	88	252	399	453	391	323	510	191	112

HAND SEWERS, PANTS: FEMALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	3	106	57.5	$0.1201	9	4	7	6	28	20	18	12	1	...	1	...
Boston	3	27	54.0	.1397	...	...	...	4	3	3	11	5	1	...	...	...
Chicago	5	506	54.0	.1646	1	2	8	44	48	64	76	70	53	87	19	4
Cincinnati	5	29	53.9	.1425	...	...	1	1	6	4	10	3	4	...	...	...
New York	11	117	56.4	.1220	6	5	13	15	29	22	9	5	8	3	1	1
Philadelphia	5	67	54.2	.1198	3	2	11	12	10	14	5	4	3	2	1	...
Rochester	3	85	54.3	.1651	1	2	4	3	6	12	14	11	8	20	4	...
Total	35	937	54.7	.1497	20	15	44	85	130	139	143	110	108	112	26	5

[a] This group is a combination of the preceding female coat, pants, and vest basters.

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913—Continued.

HAND SEWERS, PANTS: FEMALE—Continued.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1913.																
Baltimore	3	39	53.4	$0.1618	....	....	1	....	5	7	4	9	7	6	....	....
Boston	3	32	50.0	.1511	1	....	1	2	3	5	7	5	1	7	....	....
Chicago	5	461	52.0	.1673	....	1	3	14	46	80	73	74	66	86	15	3
Cincinnati	5	31	50.5	.1705	....	....	....	4	....	3	9	1	6	5	2	1
New York	11	117	52.1	.1547	1	2	4	3	19	23	17	13	9	20	4	2
Philadelphia	5	54	53.5	.1309	....	1	4	6	9	18	4	7	3	2	....	....
Rochester	3	96	52.0	.1751	....	....	....	2	9	22	8	12	18	19	5	1
Total	35	830	52.0	.1633	2	4	13	31	91	158	122	121	110	145	26	7

HAND SEWERS, VEST: FEMALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	2	44	59.1	$0.1050	7	1	9	2	13	5	4	2	1	....	....	....
Chicago	3	295	54.0	.1843	....	1	3	15	21	9	42	41	49	92	19	3
Cincinnati	4	23	54.0	.1266	....	....	....	2	9	8	2	....	1	1	....	....
New York	13	97	56.4	.1577	1	3	5	2	10	14	21	16	9	12	2	2
Philadelphia	5	23	54.7	.1430	1	1	2	2	1	4	4	2	2	4	....	....
Rochester	3	88	54.4	.1517	....	2	1	9	13	16	12	6	16	11	2	....
Total	30	570	54.9	.1646	9	8	20	32	67	56	85	67	78	120	23	5
1913.																
Baltimore	2	44	54.3	.1307	1	3	3	3	11	7	5	4	4	3	....	....
Chicago	3	291	52.0	.2089	....	1	....	3	4	13	17	34	47	121	43	8
Cincinnati	4	19	50.6	.1369	....	....	....	....	7	3	3	5	....	1	....	....
New York	13	91	52.0	.1928	....	....	....	3	6	12	8	13	9	26	9	5
Philadelphia	5	25	54.1	.1758	....	....	....	2	2	6	2	3	2	7	1	....
Rochester	3	82	52.0	.1826	....	....	1	2	10	8	8	17	12	12	8	4
Total	30	552	52.2	.1921	1	4	4	13	40	49	43	76	74	170	61	17

HAND SEWERS, ALL: FEMALE.[a]

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	3	453	58.1	$0.1274	31	18	37	25	99	80	70	46	24	20	3	....
Boston	4	74	53.3	.1476	....	2	1	5	13	11	19	10	5	5	3	....
Chicago	6	1,818	54.0	.1730	11	10	20	114	175	180	269	258	262	373	117	29
Cincinnati	18	268	53.5	.1432	9	4	7	13	36	72	47	41	16	19	4	....
New York	39	1,035	56.6	.1365	25	40	82	76	220	176	155	102	54	78	19	8
Philadelphia	14	336	54.4	.1316	12	13	25	35	65	67	41	35	18	21	4	....
Rochester	5	411	54.5	.1648	2	5	7	22	47	63	59	54	53	74	22	3
Total	89	4,395	55.1	.1535	90	92	179	290	655	649	660	546	432	590	172	40
1913.																
Baltimore	3	338	53.7	.1570	2	6	7	18	45	52	57	49	44	50	8	....
Boston	4	130	50.0	.1615	1	....	1	3	8	22	33	23	10	26	3	....
Chicago	6	1,597	52.0	.1881	....	3	6	32	112	138	195	213	246	398	138	66
Cincinnati	18	260	50.5	.1599	3	2	7	7	17	40	70	36	36	28	7	7
New York	39	1,060	52.0	.1700	4	8	13	38	116	176	160	166	79	185	77	33
Philadelphia	14	324	53.3	.1675	1	4	12	26	48	64	46	43	24	38	10	8
Rochester	5	452	52.0	.1871	1	1	1	8	37	64	57	58	68	100	35	22
Total	89	4,161	52.1	.1767	12	24	52	132	383	606	618	588	507	825	278	136

[a] This group is a combination of the preceding female coat, pants, and vest hand sewers.

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913—Continued.

OPERATORS, COAT: FEMALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	3	113	56.2	$0.1322	5	6	11	7	21	18	15	14	7	8	1	....
Boston	3	16	54.0	.1568	....	....	....	....	3	5	5	....	....	1	1	1
Chicago	5	514	54.0	.2039	....	....	6	29	23	35	45	57	52	123	86	58
Cincinnati	9	135	53.3	.1605	1	3	3	6	12	34	16	20	12	22	3	3
New York	15	41	56.0	.1377	2	1	1	4	11	5	5	3	4	5	....	....
Philadelphia	6	67	54.1	.1504	....	5	2	4	5	11	10	11	10	9	....	....
Rochester	3	63	54.6	.1897	....	....	....	4	5	8	8	8	4	15	6	5
Total	44	949	54.3	.1835	8	15	23	54	80	116	104	113	89	183	97	67
1913.																
Baltimore	3	152	53.2	.1512	2	2	....	9	28	34	27	15	16	13	5	1
Boston	3	9	50.0	.1583	....	....	....	....	....	1	2	4	2	....	....	....
Chicago	5	527	52.0	.2233	....	....	....	7	18	25	58	60	45	117	93	104
Cincinnati	9	138	50.6	.1831	1	2	3	2	5	13	19	19	21	38	11	4
New York	15	57	52.5	.1707	....	....	....	3	6	7	12	7	5	13	3	1
Philadelphia	6	74	53.7	.1708	....	....	3	2	10	15	9	5	5	16	6	3
Rochester	3	74	52.0	.2073	....	....	....	2	7	5	11	8	7	12	14	8
Total	44	1,031	52.1	.1989	3	4	6	25	74	100	138	118	101	209	132	121

OPERATORS, PANTS: FEMALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	3	117	57.1	$0.1339	7	6	10	7	25	16	11	12	11	10	2	....
Boston	2	7	54.0	.1565	....	....	....	1	....	2	2	....	....	2	....	....
Chicago	5	374	54.0	.2013	2	1	4	13	25	42	37	33	37	96	43	41
Cincinnati	6	67	53.5	.1567	1	....	....	2	8	11	17	10	10	7	1	....
New York	15	97	56.6	.1928	2	....	2	1	4	7	11	16	12	28	8	6
Philadelphia	5	45	54.1	.1579	1	....	....	2	9	9	6	3	6	6	2	1
Rochester	3	99	54.7	.1840	....	....	1	4	10	14	11	12	7	26	12	2
Total	39	806	54.8	.1819	13	7	17	30	81	101	95	86	83	175	68	50
1913.																
Baltimore	3	115	53.8	.1461	....	....	2	5	11	69	4	3	2	15	4	....
Boston	2	9	50.0	.1707	....	....	....	....	....	1	2	1	3	2	....	....
Chicago	5	432	52.0	.2218	....	....	2	5	14	24	37	64	41	109	74	62
Cincinnati	6	69	50.5	.1970	....	....	....	2	2	8	11	13	13	9	4	7
New York	15	98	52.9	.2212	....	....	....	2	5	10	8	6	10	21	21	15
Philadelphia	5	75	53.6	.1525	....	8	3	2	14	8	13	7	4	9	5	2
Rochester	3	92	52.0	.2050	....	....	1	....	5	4	12	11	15	24	12	8
Total	39	890	52.3	.2019	....	8	8	16	51	124	87	105	88	189	120	94

OPERATORS, VEST: FEMALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1912.																
Baltimore	2	47	56.9	$0.1193	4	1	6	2	11	11	5	3	3	1	....	....
Chicago	3	195	54.0	.2493	....	1	1	1	4	14	9	14	13	53	32	53
Cincinnati	4	28	53.2	.1319	....	....	....	....	3	7	4	11	2	1	....	....
New York	10	54	56.0	.1941	....	1	1	....	....	....	3	3	6	15	19	6
Rochester	3	83	54.5	.1901	....	....	....	2	4	7	10	15	15	17	9	4
Total	22	407	54.6	.2068	4	3	8	8	26	39	38	40	47	90	47	57

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913—Continued.

OPERATORS, VEST: FEMALE—Continued.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 7 cts.	7 and under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.
1913.																
Baltimore	2	51	54.4	$0.1381	....	1	1	7	8	15	6	4	4	5	....	....
Chicago	3	204	52.0	.2723	....	....	1	2	7	5	7	8	17	43	48	66
Cincinnati	4	28	49.9	.1536	....	....	....	....	2	4	10	5	3	4	....	....
New York	10	39	53.8	.2322	....	....	....	....	2	....	....	3	5	15	14	....
Rochester	3	75	52.0	.2394	....	....	....	....	....	1	2	12	8	25	11	16
Total	22	397	52.3	.2364	....	1	2	9	19	25	25	32	37	92	73	82

OPERATORS, ALL: FEMALE.[a]

1912.																
Baltimore	3	277	56.7	$0.1307	16	13	27	16	57	45	31	29	21	19	3	....
Boston	3	23	54.0	.1567	....	....	....	1	3	7	7	....	....	3	1	1
Chicago	6	1,083	54.0	.2136	2	2	11	43	52	91	91	104	102	272	161	152
Cincinnati	19	230	53.3	.1559	2	3	3	11	27	49	44	32	23	29	4	3
New York	32	192	56.3	.1814	4	2	4	5	15	15	19	25	31	52	14	6
Philadelphia	8	112	54.1	.1534	1	5	2	6	14	20	16	14	16	15	2	1
Rochester	5	245	54.6	.1875	....	....	1	10	19	29	29	35	26	58	27	11
Total	76	2,162	64.5	.1873	25	25	48	92	187	256	237	239	219	448	212	174
1913.																
Baltimore	3	318	53.6	.1472	2	3	3	21	47	118	37	22	22	33	9	1
Boston	3	18	50.0	.1645	....	....	....	....	....	2	4	5	5	2	....	....
Chicago	6	1,163	52.0	.2313	....	....	3	14	39	54	102	132	103	289	215	232
Cincinnati	19	235	50.5	.1836	1	2	3	4	9	25	40	37	37	51	15	11
New York	32	194	52.9	.2086	....	....	....	5	13	17	20	16	20	49	38	16
Philadelphia	8	149	53.6	.1616	....	8	6	4	24	23	22	12	9	25	11	5
Rochester	5	241	52.0	.2164	....	....	1	2	12	10	25	31	30	61	37	32
Total	76	2,318	52.2	.2065	3	13	16	50	144	249	250	255	226	490	325	297

BASTERS, COAT: MALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 cts. and over.
1912.																
Baltimore	3	195	58.8	$0.1862	4	3	2	11	17	31	22	23	49	28	5	....
Boston	4	42	53.4	.2335	....	....	....	....	1	5	7	4	11	5	8	1
Chicago	5	301	54.0	.2490	2	4	....	5	6	24	23	16	63	81	74	3
Cincinnati	6	7	53.8	.2993	....	....	....	....	....	....	....	....	2	2	2	1
New York	26	598	56.3	.2113	1	5	3	36	41	48	75	74	166	77	69	3
Philadelphia	7	180	54.3	.1822	3	3	7	12	18	14	30	28	42	19	4	....
Rochester	3	86	54.5	.2413	....	....	....	3	3	4	3	10	28	19	16	....
Total	54	1,409	55.7	.2151	10	15	12	67	86	126	160	155	361	231	178	8

[a] This group is a combination of the preceding female coat, pants, and vest operators.

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913—Continued.

BASTERS, COAT: MALE—Continued.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 cts. and over.
1913.																
Baltimore	3	217	53.8	$0.2188	3	2	3	8	20	20	21	19	54	37	26	4
Boston	4	38	50.0	.2800	....	....	....	....	....	....	1	....	14	11	10	2
Chicago	5	266	52.0	.3031	....	....	2	2	6	8	6	12	43	62	95	30
Cincinnati	6	18	50.6	.2245	....	....	....	....	....	2	1	4	5	4	2	....
New York	26	573	52.1	.2614	....	....	3	6	17	22	42	35	142	134	137	35
Philadelphia	7	254	53.5	.2109	....	1	1	11	17	30	27	31	75	41	18	2
Rochester	3	106	52.0	.2618	....	....	....	3	....	3	9	11	18	31	29	2
Total	54	1,472	52.5	.2540	3	3	9	30	60	85	107	112	351	320	317	75

HAND SEWERS, COAT: MALE.

1912.																
Baltimore	3	69	58.4	$0.1987	....	1	....	6	3	7	12	4	19	14	3	....
Chicago	5	36	54.0	.2516	....	....	....	....	1	....	3	5	10	7	8	2
New York	19	152	56.3	.2096	1	....	1	9	13	15	16	12	49	25	10	1
Philadelphia	5	13	54.3	.2061	....	1	....	1	1	....	1	1	5	2	1	....
Rochester	3	35	54.6	.2141	....	....	....	2	1	2	6	7	8	6	2	1
Total	35	305	56.2	.2120	1	2	1	18	19	24	38	29	91	54	24	4
1913.																
Baltimore	3	4	54.0	.1046	....	1	1	1	1	....	....	....	....	....	....	....
Chicago	5	56	52.0	.2472	....	....	....	....	1	6	4	9	14	4	16	2
New York	19	58	52.2	.2721	....	....	2	3	1	1	5	3	10	6	22	5
Philadelphia	5	7	54.0	.1255	....	....	2	1	1	2	1	....	....	....	....	....
Rochester	3	20	52.0	.3127	....	....	....	....	....	1	1	2	2	5	5	4
Total	35	145	52.2	.2564	....	1	5	5	4	10	11	14	26	15	43	11

OPERATORS, COAT: MALE.

1912.																
Baltimore	3	289	59.2	$0.1996	8	5	3	17	17	28	22	18	97	62	12	....
Boston	4	90	53.2	.3065	....	....	....	....	....	1	....	2	2	19	26	28	12
Chicago	5	160	54.0	.3125	....	1	....	2	....	7	3	4	24	35	53	31
Cincinnati	5	16	53.8	.2078	....	....	....	....	1	4	3	2	1	4	1	....
New York	26	614	56.5	.2721	3	3	2	9	9	15	33	27	154	156	165	38
Philadelphia	7	139	54.4	.2512	1	....	1	2	5	5	6	7	40	45	23	4
Rochester	3	56	54.6	.2863	....	1	....	....	1	....	1	4	9	15	22	3
Total	53	1,364	56.2	.2615	12	10	6	30	34	59	70	64	344	343	304	88
1913.																
Baltimore	3	436	53.9	.2176	4	2	10	25	46	29	41	29	90	104	53	3
Boston	4	53	50.0	.3929	....	....	....	....	....	....	....	....	3	3	28	19
Chicago	5	225	52.0	.3433	....	....	....	4	6	6	8	5	20	33	71	72
Cincinnati	5	20	50.9	.2918	....	....	....	....	....	....	1	1	3	5	9	1
New York	26	647	51.7	.3228	....	1	7	8	6	12	16	17	93	88	242	157
Philadelphia	7	186	53.6	.2678	....	1	1	4	9	6	11	9	36	49	45	15
Rochester	3	86	52.0	.3467	....	....	....	1	2	1	3	....	7	16	28	28
Total	53	1,653	52.5	.2948	4	4	18	42	69	54	80	61	252	298	476	295

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913—Continued.

OPERATORS, PANTS: MALE.

Year and city	Number of establishments	Number of employees	Average full-time hours per week	Average rate of wages per hour	Number of employees earning each classified rate of wages per hour.											
					Under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 cts. and over.
1912.																
Baltimore	3	167	58.4	$0.2081	2	3	2	8	13	11	14	23	47	29	12	3
Boston	3	41	54.0	.3064	....	....	....	....	....	....	....	4	9	10	12	6
Chicago	5	137	54.0	.2709	....	....	....	3	2	6	5	7	32	41	31	10
New York	21	468	57.6	.2578	2	1	1	10	15	12	20	29	109	147	108	14
Philadelphia	5	69	54.9	.2135	3	3	1	3	6	1	6	4	20	14	7	1
Rochester	3	8	54.4	.2757	....	....	....	....	....	....	....	....	....	7	1	.....
Total	40	890	56.5	.2495	7	7	4	24	36	30	45	67	217	248	171	34
1913.																
Baltimore	3	39	53.4	.2718	....	....	....	....	....	2	1	4	10	9	10	3
Boston	3	32	50.0	.3666	....	....	....	....	....	1	....	....	3	2	14	12
Chicago	5	115	52.0	.3341	....	....	....	....	1	2	2	3	14	22	41	30
New York	21	440	52.3	.3369	5	1	....	6	12	12	9	12	46	68	138	131
Philadelphia	5	72	53.3	.2528	2	1	2	4	6	3	6	7	6	11	14	10
Rochester	3	6	52.0	.3024	....	....	....	....	....	....	....	....	....	2	4	.....
Total	40	704	52.3	.3253	7	2	2	10	19	20	18	26	79	114	221	186

OPERATORS, VEST: MALE.

Year and city	Number of establishments	Number of employees	Average full-time hours per week	Average rate of wages per hour	Number of employees earning each classified rate of wages per hour.											
					Under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 cts. and over.
1912.																
Baltimore	2	54	59.5	$0.1925	5	1	....	7	2	3	.....	3	18	10	5	.....
Chicago	3	76	54.0	.3766	....	....	....	1	....	.....	2	1	5	13	26	28
New York	15	68	56.6	.3067	1	....	....	....	1	3	2	1	8	14	27	11
Philadelphia	5	28	55.2	.3157	....	....	....	....	....	.....	.....	.....	3	8	17	.....
Total	25	226	56.3	.3041	6	1	....	8	3	6	4	5	34	45	75	39
1913.																
Baltimore	2	46	54.0	.2420	1	....	3	1	3	.....	4	1	8	14	10	1
Chicago	3	75	52.0	.4286	....	....	....	....	1	.....	1	.....	3	6	19	45
New York	15	73	52.4	.3641	....	....	....	....	....	.....	1	.....	7	8	34	23
Philadelphia	5	30	53.5	.3795	....	....	....	1	.....	.....	.....	1	.....	.....	16	12
Total	25	224	52.8	.3627	1	....	3	2	4	.....	6	2	18	28	79	81

OPERATORS, ALL: MALE.[a]

Year and city	Number of establishments	Number of employees	Average full-time hours per week	Average rate of wages per hour	Number of employees earning each classified rate of wages per hour.											
					Under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 cts. and over.
1912.																
Baltimore	3	510	59.0	$0.2017	15	9	5	32	32	42	36	44	162	101	29	3
Boston	4	131	53.5	.3065	....	....	....	....	1	.....	2	6	28	36	40	18
Chicago	6	373	54.0	.3103	....	1	....	6	2	13	10	12	61	89	110	69
Cincinnati	5	16	53.8	.2078	....	....	....	....	1	4	3	2	1	4	1	.....
New York	51	1,150	56.7	2683	6	4	3	19	25	30	55	57	271	317	300	63
Philadelphia	14	236	54.7	.2479	4	3	2	5	11	6	12	11	63	67	47	5
Rochester	4	64	54.6	.2849	....	1	....	....	1	.....	1	4	9	22	23	3
Total	87	2,480	56.3	.2610	25	18	10	62	73	95	119	136	595	636	550	161
1913.																
Baltimore	3	521	53.9	.2238	5	2	13	26	49	31	46	34	108	127	73	7
Boston	4	85	50.0	.3830	....	....	....	....	....	1	.....	.....	6	5	42	31
Chicago	6	415	52.0	.3561	....	....	....	4	8	8	11	8	37	61	131	147
Cincinnati	5	20	50.9	.2918	....	....	....	....	....	.....	1	1	3	5	9	1
New York	51	1,160	52.0	.3308	5	2	7	14	18	24	26	29	146	164	414	311
Philadelphia	14	288	53.5	.2757	2	2	3	9	15	9	17	17	42	60	75	37
Rochester	4	92	52.0	.3438	....	....	....	1	2	1	3	.....	7	18	32	28
Total	87	2,581	52.5	.3090	12	6	23	54	92	74	104	89	349	440	776	562

[a] This group is a combination of the preceding male coat, pants, and vest operators.

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913—Continued.

PRESSERS, COAT: MALE.

Year and city	Number of establishments	Number of employees	Average full-time hours per week	Average rate of wages per hour	Number of employees earning each classified rate of wages per hour.											
					Under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 cts. and over.
1912.																
Baltimore	3	255	57.9	$0.2077	2	2	....	20	20	33	17	20	64	55	20	2
Boston	4	37	53.5	.2971	....	....	....	....	....	1	3	2	10	1	14	6
Chicago	5	596	54.0	.2712	....	....	....	3	4	17	31	35	138	174	181	13
Cincinnati	9	96	53.7	.2411	....	....	1	2	1	4	5	2	33	40	8	.....
New York	26	716	56.4	.2371	....	4	4	16	30	41	43	56	212	194	108	8
Philadelphia	7	155	54.3	2194	....	....	....	1	13	15	20	15	46	25	20	.....
Rochester	3	172	54.7	2459	....	....	3	2	2	.....	7	18	46	85	9	.....
Total	57	2,027	55.4	.2441	2	6	8	44	70	111	126	148	549	574	360	29
1913.																
Baltimore	3	309	53.5	.2415	....	....	1	9	17	22	32	31	51	77	61	8
Boston	4	48	50.0	.3207	....	....	....	....	....	....	1	2	5	17	11	12
Chicago	5	636	52.0	.3209	....	....	....	....	....	11	13	30	93	115	252	122
Cincinnati	9	91	50.9	.2713	....	....	....	2	1	4	3	2	24	18	40	2
New York	26	758	52.1	.2987	....	....	4	1	11	7	19	29	104	172	355	56
Philadelphia	7	247	53.6	.2297	....	....	2	4	9	19	24	39	72	39	31	8
Rochester	3	185	52.0	.2842	....	....	....	1	....	6	4	9	21	60	78	6
Total	57	2,274	52.3	.2878	....	....	7	17	38	69	96	142	370	493	828	214

PRESSERS, PANTS: MALE.

Year and city	Number of establishments	Number of employees	Average full-time hours per week	Average rate of wages per hour	Number of employees earning each classified rate of wages per hour.											
					Under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 cts. and over.
1912.																
Baltimore	3	56	57.4	$0.2529	....	....	....	1	8	1	5	4	14	10	3	10
Boston	3	21	54.0	.2922	....	....	....	....	....	1	.....	.....	4	7	8	1
Chicago	5	193	54.0	.3098	....	....	....	1	4	1	7	5	29	34	94	18
Cincinnati	6	30	53.6	.2105	....	....	1	2	....	2	1	5	10	9	.....	.....
New York	22	237	56.8	2563	....	....	....	....	5	7	20	16	66	73	37	13
Philadelphia	5	45	54.5	.2316	....	....	1	1	1	3	5	6	11	12	4	1
Rochester	3	55	54.6	2686	....	....	....	....	....	1	4	7	8	15	19	1
Total	47	637	55.4	.2706	....	....	2	5	18	16	42	43	142	160	165	44
1913.																
Baltimore	3	29	53.3	.2294	....	....	....	....	1	2	5	5	3	7	6	.....
Boston	3	18	50.0	.3909	....	....	....	....	....	....	.....	.....	2	4	5	7
Chicago	5	207	52.0	.3430	....	....	....	....	4	1	8	4	23	18	89	60
Cincinnati	6	32	50.7	.2350	....	....	1	1	1	3	1	3	8	9	5	.....
New York	22	193	52.5	.3139	....	....	....	....	2	3	9	14	28	40	61	36
Philadelphia	5	46	53.3	.2651	....	....	....	....	1	4	3	3	8	9	17	1
Rochester	3	61	52.0	.2773	....	....	....	....	....	....	1	1	1	18	20	18	2
Total	47	586	52.2	.3104	....	....	1	1	9	14	27	30	90	107	201	106

PRESSERS, VEST: MALE.

Year and city	Number of establishments	Number of employees	Average full-time hours per week	Average rate of wages per hour	Number of employees earning each classified rate of wages per hour.											
					Under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 cts. and over.
1912.																
Baltimore	2	25	58.0	$0.2003	....	....	....	2	4	2	3	4	7	1	1	1
Chicago	3	129	54.0	3038	....	....	....	....	2	5	1	3	18	24	66	10
Cincinnati	2	5	54.0	.2566	....	....	....	....	....	.....	.....	1	1	2	1	.....
New York	16	70	56.3	.2513	....	....	....	1	2	4	4	2	17	26	14	.....
Philadelphia	5	13	55.2	.3240	....	....	....	....	....	.....	.....	1	2	3	5	2
Rochester	3	32	54.4	.2514	....	....	1	....	....	4	.....	1	12	3	11	.....
Total	31	274	55.1	.2749	....	....	1	3	8	15	8	12	57	59	98	13

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913—Continued.

PRESSERS, VEST: MALE—Continued.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Number of employees earning each classified rate of wages per hour.											
					Under 8 cts.	8 and under 9 cts.	9 and under 10 cts.	10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 cts. and over.
1913.																
Baltimore	2	23	54.2	$0.2695	....	....	1	1	2	2	....	1	2	6	5	3
Chicago	3	113	52.0	.3823	....	....	....	....	....	1	3	3	5	20	37	44
Cincinnati	2	5	50.0	.2698	....	....	....	....	....	....	1	....	1	2	1	....
New York	16	58	52.9	.3164	....	....	....	....	....	1	2	2	10	15	16	12
Philadelphia	5	16	53.5	.3119	....	....	....	....	....	....	1	....	3	1	9	2
Rochester	3	36	52.0	.2846	....	....	....	....	....	1	2	3	10	8	8	4
Total	31	251	52.5	.3360	....	....	1	1	2	5	9	9	31	51	77	65

PRESSERS, ALL: MALE.[a]

1912.																
Baltimore	3	336	57.8	$0.2147	2	2	....	23	32	36	25	28	85	66	24	13
Boston	4	58	53.7	.2953	....	....	....	....	....	2	3	2	14	8	22	7
Chicago	6	918	54.0	.2839	....	....	....	4	10	23	39	43	185	232	341	41
Cincinnati	17	131	53.7	.2347	....	....	2	4	1	6	6	8	44	51	19	....
New York	53	1,023	56.5	.2425	....	4	4	17	37	52	67	74	295	293	159	21
Philadelphia	14	213	54.4	.2283	....	....	1	2	14	18	25	22	59	40	29	3
Rochester	5	259	54.6	.2514	....	....	4	2	2	5	11	26	66	103	39	1
Total	102	2,938	55.4	.2527	2	6	11	52	96	142	176	203	748	793	623	86
1913.																
Baltimore	3	361	53.5	.2423	....	....	2	10	20	26	37	37	56	90	72	11
Boston	4	66	50.0	.3399	....	....	....	....	....	....	1	2	7	21	16	19
Chicago	6	956	52.0	.3329	....	....	....	....	4	13	24	37	121	153	378	226
Cincinnati	17	128	50.8	.2622	....	....	1	3	2	7	5	5	33	23	47	2
New York	53	1,009	52.2	.3026	....	....	4	1	13	11	30	45	142	227	432	104
Philadelphia	14	309	53.6	.2392	....	....	2	4	10	23	28	42	83	49	57	11
Rochester	5	282	52.0	.2828	....	....	....	1	....	8	7	13	49	88	104	12
Total	102	3,111	52.3	.2959	....	....	9	19	49	88	132	181	491	651	1,106	385

BUSHELERS AND TAILORS: MALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Employees earning each classified rate of wages per hour.											
					10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 and under 50 cts.	50 and under 60 cts.	60 and under 70 cts.	70 cts. and over.
1912.																
Baltimore	3	51	57.3	$0.2066	3	3	3	7	10	15	7	3	....	....	....	....
Chicago	5	136	52.9	.2562	1	....	3	2	10	42	55	23	....	....	....	....
Cincinnati	8	33	53.7	.2252	1	....	1	5	1	14	10	1	....	....	....	....
New York	32	271	55.1	.2513	2	7	9	19	18	78	70	67	1	....	....	....
Philadelphia	7	70	56.1	.2150	....	2	1	3	7	46	9	2	....	....	....	....
Rochester	3	13	54.5	.2878	....	....	....	....	....	2	6	5	....	....	....	....
Total	58	574	54.8	.2434	7	12	17	36	46	197	157	101	1	....	....	....

[a] This group is a combination of the preceding male coat, pants, and vest pressers.

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913—Continued.

BUSHELERS AND TAILORS: MALE—Continued.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Employees earning each classified rate of wages per hour.											
					10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 and under 50 cts.	50 and under 60 cts.	60 and under 70 cts.	70 cts. and over.
1913.																
Baltimore	3	73	53.5	$0.2532	....	1	....	6	6	31	10	19	....	....	....	....
Chicago	5	144	51.4	.2744	....	....	1	....	7	22	79	33	2	....	....	....
Cincinnati	8	28	51.5	.2712	....	....	1	1	....	3	14	9	....	....	....	....
New York	32	315	51.9	.2774	1	1	11	10	13	74	89	101	10	4	1	....
Philadelphia	7	74	55.4	.2258	....	1	....	....	8	48	11	6	....	....	....	....
Rochester	3	10	52.0	.3058	....	....	....	....	....	....	6	4	....	....	....	....
Total	58	644	52.4	.2683	1	3	13	17	34	178	209	172	12	4	1	....

CUTTERS, CLOTH, HAND: MALE.

1912.																
Baltimore	3	113	52.4	$0.3362	....	....	....	....	....	3	17	83	10	....	....	....
Boston	4	53	48.9	.5751	....	....	....	....	....	....	....	2	18	13	11	9
Chicago	5	551	48.0	.4267	....	....	....	....	....	....	59	164	194	112	18	4
Cincinnati	7	131	50.2	.3941	....	....	....	....	3	4	6	37	74	7	....	....
New York	23	615	48.4	.4357	....	....	....	....	....	2	11	83	461	57	1	....
Philadelphia	5	136	52.0	.3831	....	....	....	....	....	....	12	81	37	2	3	1
Rochester	3	266	54.0	.3242	....	....	....	6	5	28	48	164	15	....	....	....
Total	50	1,865	49.7	.4083	....	....	....	6	8	37	153	614	809	191	33	14
1913.																
Baltimore	3	114	49.2	.3739	....	....	....	....	....	....	....	90	21	3	....	....
Boston	4	55	45.1	.5576	....	....	....	....	....	....	2	4	16	13	12	8
Chicago	5	536	48.0	.4573	....	....	....	....	....	....	7	132	213	155	25	4
Cincinnati	7	149	49.4	.4231	....	....	....	....	....	....	4	29	113	3	....	....
New York	23	535	48.3	.4505	....	....	....	....	....	....	1	49	388	96	1	....
Philadelphia	5	127	50.4	.4196	....	....	....	....	....	....	....	73	43	6	2	3
Rochester	3	227	52.0	.3668	....	....	....	....	....	10	15	150	51	1	....	....
Total	50	1,743	48.9	.4355	....	....	....	....	....	10	29	527	845	277	40	15

CUTTERS, CLOTH, MACHINE: MALE.

1912.																
Baltimore	3	16	53.5	$0.2925	....	....	2	1	....	2	3	4	4	....	....	....
Chicago	5	44	48.0	.5234	....	....	....	....	....	....	....	2	12	25	5	....
Cincinnati	7	15	50.8	.4150	....	....	....	....	....	....	....	4	11	....	....	....
New York	22	62	50.9	.4233	....	....	....	....	2	....	4	18	17	21	....	....
Philadelphia	3	7	54.0	.4100	....	....	....	....	....	....	1	1	5	....	....	....
Rochester	2	3	54.0	.3766	....	....	....	....	....	....	....	3	....	....	....	....
Total	42	147	50.5	.4366	....	....	2	1	2	2	8	32	49	46	5	....
1913.																
Baltimore	3	24	49.7	.3591	....	....	....	....	....	2	1	15	6	....	....	....
Chicago	5	43	48.0	.5507	....	....	....	....	....	....	....	1	9	23	8	2
Cincinnati	7	19	50.1	.4181	....	....	....	....	....	....	....	6	12	1	....	....
New York	22	62	49.0	.4488	....	....	....	....	....	....	....	5	27	30	....	....
Philadelphia	3	12	52.9	.3900	....	....	....	....	....	....	1	1	3	6	....	1
Rochester	2	6	52.0	.3590	....	....	....	....	....	....	....	1	4	1	....	....
Total	42	166	49.3	.4512	....	....	....	....	....	3	3	34	61	54	9	2

TABLE 42.—AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR IN MEN'S CLOTHING MANUFACTURING IN EACH YEAR, BY CITIES, 1912 AND 1913—Continued.

EXAMINERS, SHOP AND STOCK ROOM: MALE.

Year and city.	Number of establishments.	Number of employees.	Average full-time hours per week.	Average rate of wages per hour.	Employees earning each classified rate of wages per hour.											
					10 and under 12 cts.	12 and under 14 cts.	14 and under 16 cts.	16 and under 18 cts.	18 and under 20 cts.	20 and under 25 cts.	16 and under 18 cts.	25 and under 30 cts.	30 and under 40 cts.	40 and under 60 cts.	60 and under 70 cts.	70 cts. and over.
1912.																
Baltimore	3	58	59.1	$0.2341	....	....	1	4	1	25	25	2	....	....	....	....
Boston	4	13	49.6	.3621	....	....	....	....	....	....	1	10	1	1	....	....
Chicago	5	113	52.9	.3006	....	....	....	....	6	10	56	35	4	2	....	....
Cincinnati	7	23	51.4	.3230	....	....	....	....	....	3	8	8	3	1	....	....
New York	23	132	50.8	.3032	....	1	2	4	2	9	40	66	5	3	....	....
Philadelphia	5	44	54.2	.2567	....	1	....	....	1	15	20	7	....	....	....	....
Rochester	4	20	54.2	.3328	....	....	....	....	....	....	8	8	4	....	....	....
Total	51	403	53.1	.2920	....	2	3	8	10	62	158	136	17	7	....	....
1913.																
Baltimore	3	82	53.8	.2619	....	1	....	2	3	23	40	12	1	....	....	....
Boston	4	12	50.3	.3364	....	....	....	....	....	....	....	12	....	....	....	....
Chicago	5	128	51.2	.3114	....	....	....	....	1	6	59	52	10	....	....	....
Cincinnati	7	25	50.5	.3248	....	....	....	....	....	1	7	15	2	....	....	....
New York	23	111	50.6	.3040	....	....	3	3	3	13	21	60	5	3	....	....
Philadelphia	5	42	53.9	.2626	....	....	....	....	1	14	21	6	....	....	....	....
Rochester	4	18	52.0	.3449	....	....	....	....	....	2	....	13	3	....	....	....
Total	51	418	51.8	.2979	....	1	3	5	8	59	148	170	21	3	....	....

FITTERS OR TRIMMERS, COAT: MALE.

1912.																
Baltimore	3	30	57.8	$0.2410	[a] 4	2	2	1	1	5	7	5	3	....	....	....
Boston	4	10	53.0	.2924	....	....	....	2	....	1	2	4	1	....	....	....
Chicago	5	52	54.0	.2959	....	....	1	1	2	10	19	14	5	....	....	....
Cincinnati	9	19	53.6	.2696	....	....	....	....	1	4	13	....	1	....	....	....
New York	18	45	56.2	.3314	....	....	1	2	1	6	8	17	7	2	1	....
Philadelphia	6	19	54.3	.2925	....	....	....	....	....	5	7	7	....	....	....	....
Rochester	3	19	54.5	.2853	....	....	....	....	1	4	8	6	....	....	....	....
Total	48	194	55.1	.2915	[a] 4	2	4	6	6	35	64	53	17	2	1	....
1913.																
Baltimore	3	25	53.6	.2851	....	....	....	1	4	5	8	4	2	1	....	....
Boston	4	8	50.0	.3729	....	....	....	....	....	1	1	1	4	1	....	....
Chicago	5	46	52.0	.3668	....	....	....	....	....	2	8	21	12	3	....	....
Cincinnati	9	15	50.7	.2822	....	....	....	....	....	1	11	3	....	....	....	....
New York	18	41	51.6	.3869	....	....	....	....	....	4	3	10	23	....	1	....
Philadelphia	6	26	53.5	.3122	....	....	....	....	2	2	11	7	3	1	....	....
Rochester	3	19	52.0	.3635	....	....	....	....	....	1	4	6	8	....	....	....
Total	48	180	52.1	.3450	....	....	....	1	6	16	46	52	52	6	1	....

[a] Including 1 whose rate was 9 and under 10 cents.

Cutting and nearly all pressing are done by men. Hand sewing, which includes felling, finishing, button sewing, buttonhole making, tacking, and other fine needlework, is done mostly by females. The sexes are about equally divided in sewing-machine operating and basting. The proportion of male and female employees varies materially in the different cities, males outnumbering females in New York, Philadelphia, Baltimore, and Boston, and females outnumbering males in Rochester, Chicago, and Cincinnati. The variation is greatest in New York and least in Rochester.

The full-time hours of labor per week shown in the tables of the report are the regular full-time hours of work of the occupation under normal conditions in the establishment. The working time is the hours on duty, including intervals of waiting for work. The full-time hours per week and the relatives based thereon do not in any way indicate the extent of unemployment. Employees may work overtime or broken time, or be laid off, or a temporary reduction may be made in working hours, without such change affecting the regular full-time hours per week as presented in this bulletin.

The rates of wages per hour appearing in the tables include the wages of time workers and the earnings of pieceworkers. All time rates by the day or week have been reduced to rates per hour and the earnings of pieceworkers or persons working both at time and piece rates have been reduced to rates per hour by dividing the earnings in the pay period by the hours worked. The time workers and pieceworkers of each occupation are combined as one group. Where there was no record regularly kept by the establishment of the actual time worked by pieceworkers, at the request of the agents of the Bureau, the actual time worked was kept for the pay period taken.

The proportion of time workers and pieceworkers varies in different shops and in different cities. Cutting is usually time work. In the shops in all the cities considered the work is about evenly divided between time work and piecework, some cities working very largely on time work, others very largely on piecework.

A change in the earnings per hour of pieceworkers does not of necessity indicate a change in piece rates. Without a change of piece rates, a change in methods or of machinery, a speeding up, or more steady work resulting from greater volume of business, may increase the hourly earnings; while, on the other hand, changes in methods, slowing down of speed, or a lull in business, may reduce the hourly earnings. Varying intervals of waiting for work while on duty may also affect hourly earnings.

The full-time weekly earnings presented in this report are the earnings per week of employees working full time and the equivalent earnings for a full week of employees working broken time. In considering changes in full-time earnings per week, notice should also be taken of changes in full-time hours of labor per week. A reduction in the hours of a pieceworker may reduce his earnings in a week and leave his earnings per hour unchanged; while a reduction of hours for a week worker will, if his weekly rate remains the same, increase his rate per hour.

The averages of full-time hours per week, rates of wages per hour, and full-time weekly earnings are computed by adding the data for the individual employees and dividing the total by the number of employees.

It will be observed that the average full-time weekly earnings generally are not exactly the same as the result that would be obtained by multiplying the average rate per hour by the average hours per week, owing to the fact that hourly rates for individual employees are based on varying hours per week, which has the effect of changing the relative weighting of the wages of the several employees.

TABLE 43.—AVERAGE FULL-TIME HOURS PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, IN MEN'S CLOTHING MANUFACTURING, BY CITIES, 1912 AND 1913.

BASTERS, COAT: MALE.

City.	Number of establishments.	1912			1913		
		Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.
Baltimore	3	195	58.8	$10.89	217	53.8	$11.75
Boston	4	42	53.4	12.40	38	50.0	14.00
Chicago	5	301	54.0	13.45	266	52.0	15.77
Cincinnati	6	7	53.8	16.10	18	50.6	11.36
New York	26	598	56.3	11.89	573	52.1	13.60
Philadelphia	7	180	54.3	9.90	254	53.5	11.28
Rochester	3	86	54.5	13.15	106	52.0	13.61
Total	54	1,409	55.7	11.94	1,472	52.5	13.30

BASTERS, COAT: FEMALE.

Baltimore	3	218	58.2	$7.89	243	53.0	$7.15
Boston	4	21	54.0	6.87	8	50.0	8.03
Chicago	5	342	54.0	10.78	333	52.0	11.72
Cincinnati	7	51	53.8	8.17	55	50.9	9.09
New York	21	104	57.0	7.43	100	52.3	8.14
Philadelphia	7	50	54.4	7.51	94	53.9	8.84
Rochester	3	53	54.8	10.51	91	52.0	11.64
Total	50	839	55.5	9.15	924	52.4	9.64

TABLE 43.—AVERAGE FULL-TIME HOURS PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, IN MEN'S CLOTHING MANUFACTURING, BY CITIES, 1912 AND 1913—Continued.

BASTERS, PANTS: FEMALE.

City.	Number of establishments.	1912			1913		
		Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.
Baltimore	2	17	55.0	$6.42	5	53.4	$8.73
Boston	2	5	54.0	10.18	4	50.0	10.68
Chicago	3	107	54.0	10.15	50	52.0	8.84
New York	9	40	56.9	8.96	51	53.1	8.97
Philadelphia	4	14	54.3	5.56	17	53.6	7.21
Total	20	183	54.8	9.20	127	52.7	8.74

BASTERS, VEST: FEMALE.

Baltimore	2	28	58.2	$6.35	24	54.3	$7.64
Chicago	3	118	54.0	11.97	64	52.0	12.41
New York	16	99	56.6	9.07	90	53.1	10.27
Philadelphia	5	29	54.6	10.25	29	53.5	11.27
Total	26	274	55.4	10.17	207	52.9	10.76

BASTERS, ALL: FEMALE.[a]

Baltimore	3	263	58.0	$7.63	272	53.1	$7.22
Boston	4	26	54.0	7.50	12	50.0	8.91
Chicago	6	567	54.0	10.91	447	52.0	11.49
Cincinnati	7	51	53.8	8.17	55	50.9	9.09
New York	37	243	56.8	8.35	241	52.8	9.11
Philadelphia	13	93	54.4	8.07	140	53.8	9.16
Rochester	3	53	54.8	10.51	91	52.0	11.64
Total	73	1,296	55.4	9.37	1,258	52.5	9.73

BUSHELERS AND TAILORS: MALE.

Baltimore	3	51	57.3	$11.85	73	53.5	$13.58
Chicago	5	136	52.9	13.51	144	51.4	14.08
Cincinnati	8	33	53.7	12.09	28	51.5	13.95
New York	32	271	55.1	13.78	315	51.9	14.38
Philadelphia	7	70	56.1	12.03	74	55.4	12.46
Rochester	3	13	54.5	15.69	10	52.0	15.90
Total	58	574	54.8	13.28	644	52.4	14.01

CUTTERS, CLOTH, HAND: MALE.

Baltimore	3	113	52.4	$17.62	114	49.2	$18.40
Boston	4	53	48.9	28.08	55	45.1	25.01
Chicago	5	551	48.0	20.48	536	48.0	21.95
Cincinnati	7	131	50.2	19.67	149	49.4	20.86
New York	23	615	48.4	21.04	535	48.3	21.74
Philadelphia	5	136	52.0	19.84	127	50.4	21.06
Rochester	3	266	54.0	17.51	227	52.0	19.08
Total	50	1,865	49.7	20.18	1,743	48.9	21.22

[a] This group is a combination of the preceding female coat, pants, and vest basters.

TABLE 43.—AVERAGE FULL-TIME HOURS PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, IN MEN'S CLOTHING MANUFACTURING, BY CITIES, 1912 AND 1913—Continued.

CUTTERS, CLOTH, MACHINE: MALE.

City.	Number of establishments.	1912			1913		
		Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.
Baltimore	3	16	53.5	$15.59	24	49.7	$17.82
Chicago	5	44	48.0	25.12	43	48.0	26.43
Cincinnati	7	15	50.8	21.00	19	50.1	20.90
New York	22	62	50.9	21.31	62	49.0	21.99
Philadelphia	3	7	54.0	22.14	12	52.9	20.54
Rochester	2	3	54.0	20.33	6	52.0	18.67
Total	42	147	50.5	21.82	166	49.3	22.19

EXAMINERS, SHOP AND STOCK ROOM: MALE.

Baltimore	3	58	59.1	$13.81	82	53.8	$14.09
Boston	4	13	49.6	17.90	12	50.3	16.92
Chicago	5	113	52.9	15.86	128	51.2	15.94
Cincinnati	7	23	51.4	16.54	25	50.5	16.38
New Mexico	23	132	50.8	15.31	111	50.6	15.32
Philadelphia	5	44	54.2	13.91	42	53.9	14.17
Rochester	4	20	54.2	18.02	18	52.0	17.93
Total	51	403	53.1	15.39	418	51.8	15.37

FITTERS OR TRIMMERS, COAT: MALE.

Baltimore	3	30	57.8	$14.00	25	53.6	$15.29
Boston	4	10	53.0	15.58	8	50.0	18.64
Chicago	5	52	54.0	15.98	46	52.0	19.07
Cincinnati	9	19	53.6	14.47	15	50.7	14.30
New York	18	45	56.2	18.57	41	51.6	19.94
Philadelphia	6	19	54.3	15.88	26	53.5	16.72
Rochester	3	19	54.5	15.55	19	52.0	18.89
Total	48	194	55.1	16.05	180	52.1	17.97

HAND SEWERS, COAT: MALE.

Baltimore	3	69	58.4	$11.58	4	54.0	$5.65
Chicago	5	36	54.0	13.59	56	52.0	12.85
New York	19	152	56.3	11.75	58	52.2	14.11
Philadelphia	5	13	54.3	11.18	7	54.0	6.79
Rochester	3	35	54.6	11.69	20	52.0	16.26
Total	35	305	56.2	11.90	145	52.2	13.34

HAND SEWERS, COAT: FEMALE.

Baltimore	3	303	58.2	$7.76	255	53.6	$8.63
Boston	4	47	52.9	8.01	98	50.0	8.24
Chicago	5	1,017	54.0	9.39	845	52.0	10.00
Cincinnati	9	216	53.4	7.76	210	50.5	8.12
New York	25	821	56.6	7.70	852	52.0	8.81
Philadelphia	7	246	54.3	7.27	245	53.1	9.37
Rochester	3	238	54.6	9.25	274	52.0	10.01
Total	56	2,888	55.2	8.40	2,779	52.1	9.25

TABLE 43.—AVERAGE FULL-TIME HOURS PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, IN MEN'S CLOTHING MANUFACTURING, BY CITIES, 1912 AND 1913—Continued.

HAND SEWERS, PANTS: FEMALE.

City.	Number of establishments.	1912			1913		
		Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.
Baltimore	3	106	57.5	$6.88	39	53.4	$8.63
Boston	3	27	54.0	7.54	32	50.0	7.55
Chicago	5	506	54.0	8.89	461	52.0	9.00
Cincinnati	5	29	53.9	7.68	31	50.5	8.60
New York	11	117	56.4	6.89	117	52.1	8.07
Philadelphia	5	67	54.2	6.51	54	53.5	7.00
Rochester	3	85	54.3	9.03	96	52.0	9.11
Total	35	937	54.7	8.18	830	52.0	8.50

HAND SEWERS, VEST: FEMALE.

Baltimore	2	44	59.1	$6.19	44	54.3	$7.09
Chicago	3	295	54.0	9.96	291	52.0	10.86
Cincinnati	4	23	54.0	6.83	19	50.6	6.92
New York	13	97	56.4	8.87	91	52.0	10.00
Philadelphia	5	23	54.7	7.82	25	54.1	9.27
Rochester	3	88	54.4	8.25	82	52.0	9.50
Total	30	570	54.9	9.00	552	52.2	10.01

HAND SEWERS, ALL: FEMALE.[a]

Baltimore	3	453	58.1	$7.40	338	53.7	$8.43
Boston	4	74	53.3	7.84	130	50.0	8.07
Chicago	6	1,818	54.0	9.34	1,597	52.0	9.78
Cincinnati	18	268	53.5	7.67	260	50.5	8.09
New York	39	1,035	56.6	7.72	1,060	52.0	8.83
Philadelphia	14	336	54.4	7.16	324	53.3	8.97
Rochester	5	411	54.5	8.99	452	52.0	9.73
Total	89	4,395	55.1	8.43	4,161	52.1	9.20

OPERATORS, COAT: MALE.

Baltimore	3	289	59.2	$11.80	436	53.9	$11.72
Boston	4	90	53.2	16.33	53	50.0	19.65
Chicago	5	160	54.0	16.88	225	52.0	17.85
Cincinnati	5	16	53.8	11.17	20	50.9	14.87
New York	26	614	56.5	15.34	647	51.7	16.69
Philadelphia	7	139	54.4	13.67	186	53.6	14.33
Rochester	3	56	54.6	15.63	86	52.0	18.03
Total	53	1,364	56.2	14.63	1,653	52.5	15.41

OPERATORS, COAT: FEMALE.

Baltimore	3	113	56.2	$7.41	152	53.2	$8.04
Boston	3	16	54.0	8.47	9	50.0	7.92
Chicago	5	514	54.0	11.28	527	52.0	11.61
Cincinnati	9	135	53.3	8.57	138	50.6	9.29
New York	15	41	56.0	7.68	57	52.5	8.93
Philadelphia	6	67	54.1	8.13	74	53.7	9.18
Rochester	3	63	54.6	10.34	74	52.0	10.78
Total	44	949	54.3	9.95	1,031	52.1	10.36

[a] This group is a combination of the preceding female coat, pants, and vest hand sewers.

TABLE 43.—AVERAGE FULL-TIME HOURS PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, IN MEN'S CLOTHING MANUFACTURING, BY CITIES, 1912 AND 1913—Continued.

OPERATORS, PANTS: MALE.

City.	Number of establishments.	1912			1913		
		Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.
Baltimore	3	167	58.4	$12.18	39	53.4	$14.51
Boston	3	41	54.0	16.54	32	50.0	18.33
Chicago	5	137	54.0	14.63	115	52.0	17.37
New York	21	468	57.0	14.71	440	52.3	17.59
Philadelphia	5	69	54.9	11.73	72	53.3	13.44
Rochester	3	8	54.4	15.00	6	52.0	15.73
Total	40	890	56.5	14.08	704	52.3	16.98

OPERATORS, PANTS: FEMALE.

Baltimore	3	117	57.1	$7.64	115	53.8	$7.85
Boston	2	7	54.0	8.45	9	50.0	8.53
Chicago	5	374	54.0	10.87	432	52.0	11.53
Cincinnati	6	67	53.5	8.39	69	50.5	9.94
New York	15	97	56.6	10.91	98	52.9	11.70
Philadelphia	5	45	54.1	8.53	75	53.6	8.16
Rochester	3	99	54.7	10.08	92	52.0	10.66
Total	39	806	54.8	9.95	890	52.3	10.55

OPERATORS, VEST: MALE.

Baltimore	2	54	59.5	$11.47	46	54.0	$13.08
Chicago	3	76	54.0	20.34	75	52.0	22.29
New York	15	68	56.6	17.33	73	52.4	19.07
Philadelphia	5	28	55.2	17.43	30	53.5	20.24
Total	25	226	56.3	16.95	224	52.8	19.07

OPERATORS, VEST: FEMALE.

Baltimore	2	47	56.9	$6.78	51	54.4	$7.52
Chicago	3	195	54.0	13.47	204	52.0	14.16
Cincinnati	4	28	53.2	7.02	28	49.9	7.62
New York	10	54	56.0	10.87	39	53.8	12.49
Rochester	3	83	54.5	10.35	75	52.0	12.45
Total	22	407	54.6	11.27	397	52.3	12.36

OPERATORS, ALL: MALE.[a]

Baltimore	3	510	59.2	$11.89	521	53.9	$12.05
Boston	4	131	53.5	16.39	85	50.0	19.15
Chicago	6	373	54.0	16.76	415	52.0	18.52
Cincinnati	5	16	53.8	11.17	20	50.9	14.87
New York	51	1,150	56.7	15.20	1,160	52.0	17.18
Philadelphia	14	236	54.7	13.55	288	53.5	14.72
Rochester	4	64	54.6	15.55	92	52.0	17.88
Total	87	2,480	56.3	14.64	2,581	52.5	16.16

[a] This group is a combination of the preceding male coat, pants, and vest operators.

TABLE 43.—AVERAGE FULL-TIME HOURS PER WEEK AND AVERAGE FULL-TIME WEEKLY EARNINGS, IN MEN'S CLOTHING MANUFACTURING, BY CITIES, 1912 AND 1913—Continued.

OPERATORS, ALL: FEMALE.[a]

City.	Number of establishments.	1912			1913		
		Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.	Number of employees.	Average full-time hours per week.	Average full-time weekly earnings.
Baltimore	3	277	56.7	$7.40	318	53.6	$7.89
Boston	3	23	54.0	8.46	18	50.0	8.22
Chicago	6	1,083	54.0	11.53	1,163	52.0	12.03
Cincinnati	19	230	53.3	8.33	235	50.5	9.28
New York	32	192	56.3	10.21	194	52.9	11.04
Philadelphia	8	112	54.1	8.29	149	53.6	8.67
Rochester	5	245	54.6	10.24	241	52.0	11.25
Total	76	2,162	54.5	10.20	2,318	52.2	10.77
PRESSERS, COAT: MALE.							
Baltimore	3	255	57.9	$12.04	309	53.5	$12.92
Boston	4	37	53.5	15.89	48	50.0	16.04
Chicago	5	596	54.0	14.65	636	52.0	16.69
Cincinnati	9	96	53.7	12.94	91	50.9	13.81
New York	26	716	56.4	13.35	758	52.1	15.52
Philadelphia	7	155	54.3	11.91	247	53.6	12.30
Rochester	3	172	54.7	13.44	185	52.0	14.78
Total	57	2,027	55.4	13.49	2,274	52.3	15.03
PRESSERS, PANTS: MALE.							
Baltimore	3	56	57.4	$14.66	29	53.3	$12.23
Boston	3	21	54.0	15.78	18	50.0	19.55
Chicago	5	193	54.0	16.73	207	52.0	17.84
Cincinnati	6	30	53.6	11.30	32	50.7	11.89
New York	22	237	56.8	14.57	193	52.5	16.47
Philadelphia	5	45	54.5	12.63	46	53.3	14.11
Rochester	3	55	54.6	14.69	61	52.0	14.42
Total	47	637	55.4	14.99	586	52.2	16.19
PRESSERS, VEST: MALE.							
Baltimore	2	25	58.0	$11.68	23	54.2	$14.59
Chicago	3	129	54.0	16.41	113	52.0	19.88
Cincinnati	2	5	54.0	13.86	5	50.0	13.40
New York	16	70	56.3	14.13	58	52.9	16.69
Philadelphia	5	13	55.2	17.86	16	53.5	16.66
Rochester	3	32	54.4	13.70	36	52.0	14.80
Total	31	274	55.1	15.10	251	52.5	17.60
PRESSERS, ALL: MALE.[b]							
Baltimore	3	336	57.8	$12.45	361	53.5	$12.97
Boston	4	58	53.7	15.85	66	50.0	16.99
Chicago	6	918	54.0	15.33	956	52.0	17.31
Cincinnati	17	131	53.7	12.60	128	50.8	13.32
New York	53	1,023	56.5	13.69	1,009	52.2	15.77
Philadelphia	14	213	54.4	12.43	309	53.6	12.80
Rochester	5	259	54.6	13.74	282	52.0	14.70
Total	102	2,938	55.4	13.97	3,111	52.3	15.45

[a] This group is a combination of the preceding female coat, pants, and vest operators.
[b] This group is a combination of the preceding male coat, pants, and vest pressers.

Summary figures for each occupation covered by this report are given in the table below. According to the plan of the table, direct comparisons can be made properly only between the data for successive years coming from identical establishments. Data from identical establishments for successive years are grouped in the table. A greater number of the establishments have been canvassed each succeeding year.

TABLE 44.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, IN EACH OF THE PRINCIPAL OCCUPATIONS IN MEN'S CLOTHING MANUFACTURING, 1911 TO 1913.

[The figures for each two years grouped are for identical establishments.]

Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Per cent of employees whose full-time hours per week were—				Average rate of wages per hour.	Per cent of employees earning each classified rate of wages per hour.					Average full-time weekly earnings.
				Under 54.	54.	Over 54 and under 57.	57 to 60, inclusive.		Under 12 cts.	12 and under 16 cts.	16 and under 20 cts.	20 and under 25 cts.	25 cts. and over.	
Basters, coat, female:														
36 establishments	1911	603	55.2	2.3	61.2	20.6	15.9	$0.1756	15.9	29.2	23.5	18.7	12.6	$9.64
	1912	668	55.1	2.1	65.6	17.1	15.2	.1776	17.3	25.6	23.1	21.0	13.0	9.76
50 establishments	1912	839	55.5	3.2	52.0	22.5	22.3	.1654	25.3	26.6	20.7	17.4	10.0	9.15
	1913	924	52.4	81.9	18.1	.....	.....	.1843	18.7	23.7	21.4	17.6	18.5	9.64
Basters, pants, female:														
11 establishments	1911	152	55.0	4.6	63.2	18.4	13.8	.1529	32.8	26.3	25.6	10.5	4.6	8.42
	1912	166	54.8	3.0	68.1	17.5	11.4	.1774	15.6	27.8	25.9	20.5	10.2	9.71
20 establishments	1912	183	54.8	2.7	67.8	14.8	14.8	.1682	27.3	26.8	18.0	16.4	11.5	9.20
	1913	127	52.7	73.2	26.8	.....	.....	.1659	16.5	38.6	22.8	13.4	8.7	8.74
Basters, vest, female:														
17 establishments	1911	161	54.7	11.2	44.7	34.2	9.9	.1806	10.4	23.6	26.7	34.2	4.9	9.86
	1912	212	54.7	3.3	59.9	27.4	9.4	.2007	10.4	18.9	21.2	26.9	22.7	10.96
26 establishments	1912	274	55.4	1.8	46.4	30.3	21.5	.1845	19.0	21.2	19.0	23.4	17.5	10.17
	1913	207	52.9	54.1	37.2	8.7	.....	.2041	11.1	19.8	15.9	29.5	23.7	10.76
Basters, all, female:[a]														
50 establishments	1911	916	55.0	4.3	58.6	22.6	14.5	.1727	17.8	27.7	24.4	20.1	10.0	9.48
	1912	1,046	55.0	2.5	64.8	19.2	13.5	.1823	15.7	24.6	23.1	22.1	14.5	9.99
73 establishments	1912	1,296	55.4	2.9	53.0	23.1	21.1	.1698	24.2	25.5	20.0	18.5	11.8	9.37
	1913	1,258	52.5	76.5	22.1	1.4	.....	.1857	17.2	24.6	20.7	19.2	18.4	9.73
Hand sewers, coat, female:														
39 establishments	1911	2,668	54.8	3.6	60.7	27.7	8.1	.1545	30.0	29.1	20.3	14.9	5.7	8.45
	1912	2,427	54.8	6.2	59.4	24.8	9.7	.1571	26.8	30.3	23.3	13.6	6.0	8.60
56 establishments	1912	2,888	55.2	7.5	49.6	24.4	18.4	.1526	30.3	30.7	21.3	12.4	5.3	8.40
	1913	2,779	52.1	86.2	13.8	.....	.....	.1776	14.4	30.7	25.7	18.4	10.9	9.25
Hand sewers, pants, female:														
25 establishments	1911	656	54.9	7.4	68.9	8.5	15.3	.1407	40.4	25.6	19.9	11.3	2.8	7.69
	1912	819	54.5	7.7	77.3	5.7	9.3	.1530	30.4	28.1	23.9	13.9	3.7	8.32
35 establishments	1912	937	54.7	6.0	68.6	13.2	12.2	.1497	31.4	30.1	23.3	12.0	3.3	8.18
	1913	830	52.0	88.0	12.0	.....	.....	.1633	17.0	33.7	27.8	17.5	4.0	8.50
Hand sewers, vest, female:														
21 establishments	1911	339	54.6	3.8	58.7	32.4	5.0	.1671	19.8	27.2	26.0	20.6	6.5	9.10
	1912	512	54.3	3.7	72.7	21.3	2.3	.1731	18.7	22.7	28.1	25.0	5.7	9.40
30 establishments	1912	570	54.9	3.3	58.9	25.8	11.9	.1646	23.9	24.7	25.4	21.1	4.9	9.00
	1913	552	52.2	84.1	11.6	4.3	.....	.1921	11.2	16.7	27.2	30.8	14.1	10.01
Hand sewers, all, female:[b]														
61 establishments	1911	3,663	54.8	4.3	62.0	24.7	9.1	.1532	30.8	28.4	20.7	14.8	5.2	8.37
	1912	3,758	54.7	6.2	65.1	20.1	8.5	.1584	26.3	28.7	24.1	15.2	5.4	8.65
89 establishments	1912	4,395	55.1	6.7	54.9	22.2	16.2	.1535	29.7	29.8	22.3	13.4	4.8	8.43
	1913	4,161	52.1	86.3	13.1	.6	.....	.1767	14.5	29.4	26.3	19.8	9.9	9.20
Operators, coat, female:														
34 establishments	1911	756	54.2	7.1	76.7	13.6	2.5	.1945	14.7	21.4	20.2	25.3	18.4	10.53
	1912	833	54.1	8.1	80.2	9.6	2.1	.1908	15.9	21.3	21.3	21.8	19.5	10.32
44 establishments	1912	949	54.3	7.4	73.8	15.3	3.6	.1835	19.0	23.2	21.3	19.3	17.3	9.95
	1913	1,031	52.1	86.1	13.9	.....	.....	.1989	10.9	23.1	21.2	20.3	24.5	10.36

[a] This group is a combination of the preceding female coat, pants, and vest basters.
[b] This group is a combination of the preceding female coat, pants, and vest hand sewers.

TABLE 44.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, IN EACH OF THE PRINCIPAL OCCUPATIONS IN MEN'S CLOTHING MANUFACTURING, 1911 TO 1913—Continued.

Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Per cent of employees whose full-time hours per week were—				Average rate of wages per hour.	Per cent of employees earning each classified rate of wages per hour.					Average full-time weekly earnings.
				Under 54.	54.	Over 54 and under 57.	57 to 60, inclusive.		Under 12 cts.	12 and under 16 cts.	16 and under 20 cts.	20 and under 25 cts.	25 cts. and over.	
Operators, pants, female:														
26 establishments	1911	599	54.8	10.2	57.3	21.5	11.0	$0.1803	17.4	26.0	25.6	16.9	14.1	$9.83
	1912	752	54.6	7.8	64.2	17.7	10.2	.1870	16.7	23.2	21.1	21.7	17.2	10.21
39 establishments	1912	806	54.8	6.2	57.9	23.6	12.3	.1819	18.4	24.3	21.0	21.7	14.6	9.95
	1913	890	52.3	78.3	21.7	.....	.....	.2019	9.3	23.7	21.7	21.2	24.0	10.55
Operators, vest, female:														
17 establishments	1911	312	54.4	5.4	59.9	26.3	8.3	.2064	6.7	19.9	26.3	23.7	23.4	11.23
	1912	366	54.2	5.0	68.0	21.3	5.7	.2181	6.2	17.7	23.3	23.8	29.0	11.82
22 establishments	1912	407	54.6	4.2	53.6	31.4	10.8	.2068	12.0	18.9	21.4	22.1	25.6	11.27
	1913	397	52.3	78.6	16.1	5.3	.....	.2364	7.8	12.6	17.4	23.2	39.0	12.36
Operators, all, female:[a]														
55 establishments	1911	1,667	54.5	7.9	66.6	18.8	6.7	.1916	14.2	22.8	23.2	22.0	17.8	10.43
	1912	1,951	54.3	7.5	71.8	14.9	5.9	.1945	14.4	21.4	21.6	22.1	20.5	10.56
76 establishments	1912	2,162	54.5	6.3	64.1	21.4	8.2	.1873	17.4	22.8	21.2	20.7	17.9	10.20
	1913	2,318	52.2	81.8	17.3	.9	.....	.2065	9.7	21.5	20.8	21.1	26.8	10.77
									Under 16 cts.	16 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.	
Basters, coat, male:														
30 establishments	1911	1,112	55.3	7.0	41.7	38.1	13.1	.2203	21.6	20.1	24.8	20.2	13.2	12.15
	1912	1,036	55.2	7.4	46.2	33.2	13.1	.2179	21.0	21.0	26.4	18.1	13.6	12.01
54 establishments	1912	1,409	55.7	8.7	34.6	31.9	24.9	.2151	22.4	22.4	25.6	16.4	13.2	11.94
	1913	1,472	52.5	74.0	26.0	.....	.....	.2540	12.9	14.9	23.8	21.7	26.6	13.30
Hand sewers, coat, male:														
18 establishments	1911	221	55.8	6.8	31.7	37.6	23.9	.2037	29.5	27.2	19.9	10.9	12.7	11.34
	1912	190	56.0	11.6	25.8	37.4	25.3	.2171	18.4	24.7	27.4	18.4	11.0	12.11
35 establishments	1912	305	56.2	9.8	19.7	25.4	35.1	.2120	21.3	22.0	29.8	17.7	9.2	11.90
	1913	145	52.2	84.1	15.9	.....	.....	.2564	17.2	17.2	17.9	10.3	37.2	13.34
Operators, coat, male:														
31 establishments	1911	913	55.9	4.7	30.7	40.6	24.0	.2641	13.0	9.3	23.9	21.5	32.4	14.70
	1912	878	56.0	5.9	30.4	37.8	25.8	.2656	11.1	8.4	23.3	26.2	31.0	14.80
53 establishments	1912	1,364	56.2	9.8	23.5	39.6	36.1	.2615	11.1	9.8	25.2	25.1	28.7	14.63
	1913	1,653	52.5	66.9	33.1	.....	.....	.2948	11.6	8.5	15.2	18.0	46.6	15.41
Operators, pants, male:														
20 establishments	1911	439	56.8	5.9	26.0	23.2	44.8	.2418	16.9	11.8	26.7	21.6	23.0	13.71
	1912	515	56.8	6.6	32.4	15.9	45.1	.2427	14.9	14.4	26.4	22.5	22.0	13.76
40 establishments	1912	890	56.5	3.8	27.2	29.7	39.2	.2495	12.1	12.6	24.4	27.9	23.0	14.08
	1913	704	52.3	76.6	23.0	.4	.....	.3253	8.5	6.3	11.2	16.2	57.8	16.98
Operators, vest, male:														
16 establishments	1911	109	55.2	10.1	31.2	43.1	15.6	.3103	5.5	6.5	13.8	18.3	55.9	17.11
	1912	140	54.7	5.7	57.9	26.4	10.0	.3258	2.8	3.6	7.1	17.1	69.2	19.28
25 establishments	1912	226	56.3	3.1	35.8	25.2	35.8	.3041	10.6	4.0	15.0	19.9	50.4	16.95
	1913	224	52.8	58.0	35.7	6.3	.....	.3627	4.5	3.6	8.0	12.5	71.4	19.07
Operators, all, male:[b]														
46 establishments	1911	1,461	56.1	5.5	29.3	35.6	29.6	.2608	13.6	9.9	24.0	21.3	31.4	14.58
	1912	1,533	56.1	6.1	33.6	29.4	30.9	.2659	11.5	10.0	22.9	24.1	31.5	14.86
87 establishments	1912	2,480	56.3	7.1	27.0	29.8	37.2	.2610	11.4	10.3	24.0	25.6	28.7	14.64
	1913	2,581	52.5	68.8	30.6	.7	.....	.3090	10.1	7.5	13.5	17.0	51.8	16.16
Pressers, coat, male:														
40 establishments	1911	1,573	55.1	4.5	52.2	33.0	10.4	.2397	13.0	16.9	23.2	28.7	18.3	13.18
	1912	1,606	55.0	7.0	52.9	30.0	10.1	.2482	9.9	14.4	25.3	29.9	20.4	13.63
57 establishments	1912	2,027	55.4	8.1	42.0	30.1	19.8	.2441	11.9	13.5	27.1	28.3	19.2	13.49
	1913	2,274	52.3	81.6	18.4	.....	.....	.2878	5.8	10.5	16.3	21.7	45.8	15.03

[a] This group is a combination of the preceding female coat, pants, and vest operators.
[b] This group is a combination of the preceding male coat, pants, and vest operators.

TABLE 44.—AVERAGE AND CLASSIFIED FULL-TIME HOURS PER WEEK, AVERAGE AND CLASSIFIED RATES OF WAGES PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, IN EACH OF THE PRINCIPAL OCCUPATIONS IN MEN'S CLOTHING MANUFACTURING, 1911 TO 1913—Continued.

Occupation, sex, and number of establishments.	Year.	Number of employees.	Average full-time hours per week.	Per cent of employees whose full-time hours per week were—				Average rate of wages per hour.	Per cent of employees earning each classified rate of wages per hour.					Average full-time weekly earnings.
				Under 54.	54.	Over 54 and under 57.	57 to 60, inclusive.		Under 16 cts.	16 and under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 cts. and over.	
Pressers, pants, male:														
29 establishments	1911	401	55.4	7.5	47.4	23.9	21.2	$0.2496	15.0	20.4	16.2	20.2	27.9	$13.84
	1912	461	55.2	7.2	57.5	17.6	17.8	.2788	6.8	15.6	19.3	18.9	39.5	15.40
47 establishments	1912	637	55.4	4.7	45.1	29.8	20.4	.2706	6.4	13.3	22.3	25.1	32.8	14.99
	1913	586	52.2	86.2	13.5	.3	.....	.3104	4.3	9.7	15.4	18.3	52.4	16.19
Pressers, vest, male:														
20 establishments	1911	186	54.7	4.8	54.8	29.0	11.3	.2629	5.9	18.3	20.4	22.6	32.8	14.37
	1912	225	54.5	4.9	64.4	23.6	7.1	.2852	7.1	6.7	16.9	22.7	46.6	15.52
31 establishments	1912	274	55.1	3.3	50.4	30.7	15.7	.2749	9.9	7.3	20.8	21.5	40.5	15.10
	1913	251	52.5	74.9	21.1	4.0	.....	.3360	3.6	7.2	12.4	20.3	56.6	17.60
Pressers, all, males:[a]														
64 establishments	1911	2,160	55.1	5.0	51.5	31.0	12.4	.2435	12.8	17.6	21.7	26.6	21.4	13.40
	1912	2,292	55.0	6.8	55.0	26.9	11.3	.2580	9.1	13.9	23.3	27.0	26.8	14.17
102 establishments	1912	2,938	55.4	6.9	43.4	30.1	19.5	.2527	10.5	12.9	25.5	27.0	24.1	13.97
	1913	3,111	52.3	81.9	17.7	.4	.....	.2959	5.3	10.1	15.8	20.9	47.9	15.45
									Under 20 cts.	20 and under 25 cts.	25 and under 30 cts.	30 and under 40 cts.	40 cts. and over.	
Bushelers and tailors, male:														
42 establishments	1911	496	54.2	23.4	27.4	37.1	12.1	.2475	21.8	27.0	32.9	17.3	1.0	13.33
	1912	454	54.2	23.3	31.7	32.4	12.6	.2477	17.3	33.9	28.0	20.5	.2	13.34
58 establishments	1912	574	54.8	19.9	29.1	31.7	19.3	.2434	20.6	34.3	27.4	17.6	.2	13.28
	1913	644	52.4	82.8	13.7	.....	3.6	.2683	10.6	27.6	32.5	26.7	2.6	14.01
Cutters, cloth, hand, male:														
39 establishments	1911	1,545	49.9	73.9	24.1	1.3	.6	.4035	1.0	3.0	7.6	35.7	52.7	20.01
	1912	1,694	49.9	68.5	30.6	.....	.8	.4032	.9	2.3	.90	34.2	53.7	19.99
50 establishments	1912	1,865	49.7	73.5	25.7	.....	.8	.4083	.8	2.0	8.2	32.9	56.1	20.18
	1913	1,743	48.9	99.1	.9	.....	.....	.4355	.....	.6	1.7	30.2	67.5	21.22
Cutters, cloth, machine, male:														
26 establishments	1911	101	50.3	75.2	5.0	12.9	6.9	.4412	5.0	1.0	6.9	18.8	68.3	21.89
	1912	90	49.9	73.4	23.3	.....	3.3	.4371	5.5	2.2	4.4	17.8	69.9	21.61
42 establishments	1912	147	50.5	67.3	21.1	.....	11.6	.4366	3.4	1.4	5.4	21.8	68.0	21.82
	1913	166	49.3	95.2	4.8	.....	.....	.4512	.....	1.8	1.8	20.5	75.9	22.19
Examiners, shop and stock room, male:														
31 establishments	1911	269	52.4	37.9	53.5	5.6	3.0	.2914	4.0	19.3	33.5	38.3	4.8	15.20
	1912	268	52.2	39.2	54.9	3.4	2.6	.3023	6.3	10.8	39.6	35.4	7.8	15.67
51 establishments	1912	403	53.1	39.7	37.5	7.2	15.6	.2920	5.7	15.4	39.2	33.7	6.0	15.39
	1913	418	51.8	70.3	29.2	.5	.....	.2978	4.1	14.1	35.4	40.7	5.7	15.37
Fitters or trimmers, coat, male:														
32 establishments	1911	140	54.5	6.4	59.3	32.1	2.1	.2943	10.0	16.4	36.4	25.7	11.5	16.05
	1912	131	54.4	6.1	70.2	21.4	2.3	.2970	9.2	17.6	35.9	29.0	8.4	16.16
48 establishments	1912	194	55.1	9.3	47.9	27.8	14.9	.2915	11.3	18.0	33.0	27.3	10.3	16.05
	1913	180	52.1	79.4	20.6	.....	.....	.3450	3.9	8.9	25.6	28.9	32.8	17.97

[a] This group is a combination of the preceding male coat, pants, and vest pressers.

From the table it is seen that in 1913 the average full-time weekly earnings of male employees, represented by 13 occupations, ranged from $13.30 for basters, coats, to $22.19 for cutters, cloth, machine. For females, represented by 9 occupations, the average full-time weekly earnings varied from $8.50 for hand sewers, pants, to $12.36 for operators, vests. The average hours of labor in 1913 of nearly all occupations were between 52 and 53 per week. For cutters, the average was about 49 hours per week.

Wages and hours of labor differ in different establishments; hence the inclusion or exclusion of one or more establishments in a group, if the wages and hours thereof differ considerably from the average, may raise or lower the average for the group. Referring to the above table, it is seen that the average full-time weekly earnings of female coat basters in 36 establishments in 1912 was $9.76, while in 50 establishments, in the same year, the average was $9.15. In 36 establishments there was an increase in full-time weekly earnings from $9.64 in 1911 to $9.76 in 1912, and in 50 establishments there was an increase from $9.15 in 1912 to $9.64 in 1913. While the average weekly earnings of the two different groups of establishments happen to be the same in 1911 and 1913, the first group of comparable figures shows an increase from 1911 to 1912 and the second group of comparable figures shows an increase from 1912 to 1913. Thus, the figures of the two groups considered together indicate an increase of weekly earnings for the occupation between 1911 and 1913. As before stated, direct comparison can be made only between the data for identical establishments in two consecutive years.

Owing to a change in the number of establishments from year to year, and the consequent change in the averages, it is difficult to make a comparison of the actual data over a period of years which will give an exact measure of the changes. To aid in the making of such a comparison, relative (or index) numbers have been computed from the averages of the preceding table for full-time hours per week, rates of wages per hour, and full-time weekly earnings for each occupation for the years 1911 to 1913, inclusive. These relative numbers are simply percentages in which the figures for 1913 are taken as the base, or 100 per cent. The relative for each year is the per cent that the average for that year is of the average for 1913. Thus, in the table below, the full-time weekly earnings of female coat basters in 1911 were 93.8 per cent of the full-time weekly earnings in 1913, as determined from the two groups of comparable averages shown in the table above. In 1912 the relative full-time weekly earnings in this occupation were 94.9 per cent of such earnings in 1913.

TABLE 45.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN THE PRINCIPAL OCCUPATIONS IN MEN'S CLOTHING MANUFACTURING, 1911 TO 1913.

Year.	Basters, coat, male.			Basters, coat, female.			Basters, pants, female.			Basters, vest, female.		
	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time weekly earnings.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time weekly earnings.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time weekly earnings.	Relative full-time hours per week.	Relative rate of wages per hour.	Relative full-time weekly earnings.
1911	106.3	85.6	90.8	106.1	88.7	93.8	104.4	87.4	91.3	104.7	81.3	85.0
1912	106.1	84.7	89.8	105.9	89.7	94.9	104.0	101.4	105.3	104.7	90.4	94.5
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Basters, all, female.[a]			Bushelers and tailors, male.			Cutters, cloth, hand, male.			Cutters, cloth, machine, male.		
1911	105.5	86.6	91.4	104.6	90.6	74.7	101.6	93.8	95.2	103.3	97.7	99.6
1912	105.5	91.4	96.3	104.6	90.7	94.8	101.6	93.8	95.1	102.4	96.8	98.3
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Examiners, shop and stock room, male.			Fitters or trimmers, coat, male.			Hand sewers, coat, male.			Hand sewers, coat, female.		
1191	102.9	94.5	97.1	106.0	83.7	88.7	107.3	77.6	83.5	106.0	84.5	89.2
1912	102.5	98.1	100.1	105.8	84.5	89.3	107.7	82.7	89.2	106.0	85.9	90.8
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Hand sewers, pants, female.			Hand sewers, vest, female.			Hand sewers, all, female.[b]			Operators, coat, male.		
1911	106.0	84.3	89.0	105.8	82.7	87.0	106.0	84.0	88.7	106.9	88.2	94.3
1912	105.2	91.7	96.2	105.2	85.7	89.9	105.8	86.9	91.6	107.1	88.7	94.9
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Operators, coat, female.			Operators, pants, male.			Operators, pants, female.			Operators, vest, male.		
1911	104.4	94.0	98.0	108.0	76.4	82.6	105.2	86.9	91.3	107.6	79.9	78.9
1912	104.2	92.3	96.0	108.0	76.7	82.9	104.8	90.1	94.3	106.6	83.8	88.9
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Operators, vest, female.			Operators, all, male.[c]			Operators, all, female.[d]			Pressers, coat, male.		
1911	104.8	82.8	86.6	107.2	82.8	88.9	104.8	89.3	93.5	106.1	81.9	86.8
1912	104.4	87.5	91.2	107.2	84.5	90.6	104.4	90.7	94.7	105.9	84.8	89.8
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	Pressers, pants, male.			Pressers, vest, male.			Pressers, all, male.[e]					
1911	106.5	78.0	83.2	105.3	75.4	79.4	106.1	80.6	85.5			
1912	106.1	87.2	92.6	105.0	81.8	85.8	105.9	85.4	90.4			
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			

[a] This group is a combination of the preceding female coat, pants, and vest basters.
[b] This group is a combination of the preceding female coat, pants, and vest hand sewers.
[c] This group is a combination of the preceding male coat, pants, and vest operators.
[d] This group is a combination of the preceding female coat, pants, and vest operators.
[e] This group is a combination of the preceding male coat, pants, and vest pressers.

The relative numbers for the several occupations in the above table show a general tendency toward a reduction of working hours and increase in rates of wages and of earnings per full week in this industry.

No data are available to show the amount of work afforded employees each year or the variation from year to year. The relative full-time hours per week indicate the change in the hours of labor of employees working full time, but do not reflect in any way a greater or less amount of full-time work afforded. Likewise, the relative full-time weekly earnings are based on the earnings of employees who worked full time and the equivalent full-time earnings of such employees who worked less than full time.

A like table of relative (or index) numbers is next shown for the industry as a whole as determined by a combination of the data for the several occupations covered. Data were obtained for the principal occupations of the industry, as before stated, but not for all occupations.

TABLE 46.—RELATIVE FULL-TIME HOURS PER WEEK, RATES OF WAGES PER HOUR, AND FULL-TIME WEEKLY EARNINGS IN MEN'S CLOTHING MANUFACTURING, 1911 TO 1913.

(1913=100.0)

Year.	Relative full-time hours per week.	Relative rates of wages per hour.	Relative full-time weekly earnings.
1911	105.6	86.0	90.3
1912	105.4	88.1	92.3
1913	100.0	100.0	100.0

From the table above it is seen that the relative (or index) numbers for full-time hours per week in the manufacture of men's ready-made clothing decreased from 105.6 in 1911 to 100 in 1913; or, in other words, full-time hours per week were 105.6 per cent in 1911 of what they were in 1913, and in 1912 105.4 per cent of what they were in 1913. The relative number for rates of wages per hour increased from 86 in 1911 to 88.1 in 1912 and 100 in 1913. The increase in full-time weekly earnings was somewhat less than in rates of wages per hour because of the reduction of hours in the industry. Relative full-time weekly earnings increased from 90.3 in 1911 to 92.3 in 1912, and to 100 in 1913.

The relative numbers for each year from 1911 to 1913 for the industry as a whole were computed, not from the relative numbers for the several occupations but from the actual hours, rates of wages per hour, and weekly earnings of all employees in the several occupations. For each year the average hours, rates of wages, and weekly earnings were computed for all employees in all occupations combined, and the average for each preceding year was compared with the average for 1913 to determine the relative (or index) number for the industry.

A word of caution is given as to the use of relative numbers. The per cent of increase or decrease from one year to another is not the difference between the relative numbers for the years. Thus, in the table above, the relative rate of wages per hour increased from 86 in 1911 to 100 in 1913, an increase in the relative of 14 over the relative 86, making an increase of 16.3 per cent.

The average rates of earnings per hour in the specified occupations in the seven specified cities, as shown in the preceding tables, are also shown in the following condensed table, in which the average earnings in each occupation are arranged in the order of cities, with the highest averages at the top and the lowest at the bottom.

TABLE 47.—AVERAGE RATE OF EARNINGS PER HOUR, BY OCCUPATIONS AND BY CITIES, IN 1913, ARRANGED IN ORDER OF HIGHEST TO LOWEST AVERAGE RATE PER HOUR.

[Compiled from reports of the United States Bureau of Labor statistics.]

Occupation, sex, and city.	Average rate of earnings per hour.
MALE.	
Cutters, cloth, hand:	
Boston	$0.5576
Chicago	.4573
New York	.4505
Cincinnati	.4231
Philadelphia	.4196
Baltimore	.3739
Rochester	.3660
Total	.4355
Cutters, cloth, machine:	
Chicago	.5507
New York	.4488
Cincinnati	.4181
Philadelphia	.3900
Baltimore	.3591
Rochester	.3590
Total	.4512
Fitters or trimmers, coat:	
New York	.3869
Boston	.3729
Chicago	.3668
Rochester	.3635
Philadelphia	.3122
Baltimore	.2851
Cincinnati	.2822
Total	.3450
Basters, coat:	
Chicago	.3031
Boston	.2800
Rochester	.2618
New York	.2614
Cincinnati	.2245
Baltimore	.2188
Philadelphia	.2109
Total	.2540
Operators, coat:	
Boston	.3929
Rochester	.3467
Chicago	.3433
New York	.3228
Cincinnati	.2918
Philadelphia	.2678
Baltimore	.2176
Total	.2948
Operators, pants:	
Boston	.3666
New York	.3369
Chicago	.3341
Rochester	.3024
Baltimore	.2718
Philadelphia	.2528
Total	.3253
Operators, vest:	
Chicago	.4286
Philadelphia	.3795
New York	.3641
Baltimore	.2420
Total	.3627
MALE—continued.	
Operators, all:	
Boston	$0.3830
Chicago	.3561
Rochester	.3438
New York	.3308
Cincinnati	.2918
Philadelphia	.2757
Baltimore	.2238
Total	.3090
Pressers, coat:	
Chicago	.3209
Boston	.3207
New York	.2987
Rochester	.2842
Cincinnati	.2713
Baltimore	.2415
Philadelphia	.2297
Total	.2878
Pressers, pants:	
Boston	.3909
Chicago	.3430
New York	.3139
Rochester	.2773
Philadelphia	.2651
Cincinnati	.2350
Baltimore	.2294
Total	.3104
Pressers, vests:	
Chicago	.3823
New York	.3164
Philadelphia	.3119
Rochester	.2846
Cincinnati	.2698
Baltimore	.2695
Total	.3360
Pressers, all:	
Boston	.3399
Chicago	.3329
New York	.3026
Rochester	.2828
Cincinnati	.2622
Baltimore	.2423
Philadelphia	.2392
Total	.2959
Hand sewers, coats:	
Rochester	.3127
New York	.2721
Chicago	.2472
Philadelphia	.1255
Baltimore	.1046
Total	.2564
Examiners, shop and stock room:	
Rochester	.3449
Boston	.3364
Cincinnati	.3248
Chicago	.3114
New York	.3040
Philadelphia	.2826
Baltimore	.2619
Total	.2978

TABLE 47.—AVERAGE RATE OF EARNINGS PER HOUR, BY OCCUPATIONS AND BY CITIES, IN 1913, ARRANGED IN ORDER OF HIGHEST TO LOWEST AVERAGE RATE PER HOUR—Continued.

Occupation, sex, and city.	Average rate of earnings per hour.
MALE—continued.	
Bushelers and tailors:	
Rochester	$0.3058
New York	.2774
Chicago	.2744
Cincinnati	.2712
Baltimore	.2532
Philadelphia	.2258
Total	.2683
FEMALE.	
Basters, coat:	
Chicago	$0.2254
Rochester	.2239
Cincinnati	.1783
Philadelphia	.1641
Boston	.1606
New York	.1564
Baltimore	.1345
Total	.1843
Basters, pants:	
Boston	.2137
Chicago	.1699
New York	.1684
Baltimore	.1632
Philadelphia	.1365
Total	.1659
Basters, vest:	
Chicago	.2385
Philadelphia	.2110
New York	.1943
Baltimore	.1409
Total	.2041
Basters, all:	
Rochester	.2239
Chicago	.2210
Boston	.1783
Cincinnati	.1783
New York	.1731
Philadelphia	.1704
Baltimore	.1357
Total	.1857
Operators, coat:	
Chicago	.2233
Rochester	.2073
Cincinnati	.1831
Philadelphia	.1708
New York	.1707
Boston	.1583
Baltimore	.1512
Total	.1989
Operators, pants:	
Chicago	.2218
New York	.2212
Rochester	.2050
Cincinnati	.1970

Occupation, sex, and city.	Average rate of earnings per hour.
FEMALE—continued.	
Operators, pants—Continued.	
Boston	$0.1707
Philadelphia	.1525
Baltimore	.1461
Total	.2019
Operators, vest:	
Chicago	.2723
Rochester	.2394
New York	.2322
Cincinnati	.1526
Baltimore	.1381
Total	.2364
Operators, all:	
Chicago	.2313
Rochester	.2164
New York	.2086
Cincinnati	.1836
Boston	.1645
Philadelphia	.1616
Baltimore	.1472
Total	.2065
Hand sewers, coat:	
Rochester	.1926
Chicago	.1924
Philadelphia	.1748
New York	.1697
Boston	.1649
Baltimore	.1608
Cincinnati	.1604
Total	.1776
Hand sewers, pants:	
Rochester	.1751
Cincinnati	.1705
Chicago	.1673
Baltimore	.1618
New York	.1547
Boston	.1511
Philadelphia	.1309
Total	.1633
Hand sewers, vest:	
Chicago	.2089
New York	.1928
Rochester	.1826
Philadelphia	.1758
Cincinnati	.1369
Baltimore	.1307
Total	.1921
Hand sewers, all:	
Chicago	.1881
Rochester	.1871
New York	.1700
Philadelphia	.1675
Boston	.1615
Cincinnati	.1599
Baltimore	.1570
Total	.1767

Reference to this table will show that the average earnings per hour of the males in most of the specified occupations were highest in Boston, New York, Rochester, and Chicago, and those of the females were highest in Rochester and Chicago.

CHAPTER VI.

COST-FINDING AND ACCOUNTING CONDITIONS.

Mr. David Kirschbaum, who was elected president of the National Association of Clothiers, at its convention in 1915, delivered to the convention an address on "Evil Tendencies in American Trade," in which he said:

> Industrial experience shows as many failures due to deep price cutting as to any other cause. Unfortunately, these price concessions, in the majority of cases, are not based on exact knowledge as to cost, and this has been so generally true that in many industries the trade associations have found it well worth while to educate the members of their associations as to the exact methods of figuring costs.
>
> I haven't the least doubt that it would pay the National Association of Clothiers to employ or recommend a thoroughly expert manufacturing cost accountant, whose services would be at the call of the individual members, and who, at a nominal cost, would render an invaluable service to them and to the entire association. Possibly no industry in the United States has more manufacturers that have so little knowledge of correct cost accounting as the manufacture of clothing. I trust the subject will appeal to the national board as important enough to take up for serious consideration. The idea of helping your competitors to figure costs correctly is not new, as stated. It is being done in various lines with most satisfactory results.

While some of the largest clothing houses have endeavored to institute accurate cost-finding systems, the trade has a general tendency to regard keeping costs as of minor importance. In most instances the costs are handled by the bookkeeper, who usually is not familiar with cost finding. Many concerns satisfy their cost curiosity by having a certified public accountant draw up a trial balance once or twice a year. These trial balances, if they show a profit, are usually relegated to some drawer and are used only to furnish the bank and creditors with figures. In reality the work of the certified accountant is not to find cost, but to check up the bookkeeper and secure figures to be used in getting credit.

As goods are usually sold months before they are manufactured, the determination of a selling price long before the goods are made up is essential. Therefore, cost keeping is of utmost importance. In order to determine a selling price that will net a profit there should be an estimated cost, based on accurate, reliable, recorded figures of the preceding year, with allowances made, where possible, for such deviations from last year's business as the manufacturer can accurately determine. Together with this estimated cost there should be the actual cost, week by week, to check up the estimated cost and find wherein the estimated cost is incorrect. The actual cost will determine where adjustments are to be made, which styles should be pushed and which discarded.

The method of most manufacturers of "figuring back" is a good one if the component elements are accurately known. Retailers wishing to sell a suit for $20 will not pay the wholesaler more than $13.50 for it. Because of this fact, manufacturers, instead of creating a garment, calculating their cost, and adding a profit to determine the selling price, start with the selling price, which determines the price of cloth and the kind of workmanship. For a $13.50 suit the

manufacturer will determine that the best cloth he can put in will cost, let us say, $1.25 a yard, the direct labor must not cost more than $3.50, etc.

This method would be satisfactory if the manufacturer knew accurately what his indirect labor and complete overhead charges are, but in most instances these costs are only estimates. In most cases there is no proper distribution of expense. Indirect labor is often included with direct labor, what one manufacturer classes as overhead another will consider profit, and the general expense usually includes every variety of overhead cost. The yardage in a garment is usually an average; discounts received and allowed are often considered to take care of each other, though investigation will show that in most instances the total discount allowed for any period is much larger than the discount received.

SIMPLIFIED COST ACCOUNTING.[a]

The object of conducting business is to secure profits. Nothing that relates to manufacturing is of more importance than "costing." Efficiency rules may be applied in an excellently equipped factory, but, unless the proprietor has an adequate cost-finding system, he is liable to suffer financial loss. If he does not know with a close degree of accuracy what the different articles he manufactures have cost and at what prices he can afford to sell them, he is not in a position to meet competition intelligently, and he invites business disaster. Under conditions as they existed formerly, he may have been satisfied with the profit earned on his whole line of products, as shown by his annual balance sheet, but in these days there is the keenest competition in almost every line of manufacturing, and the survival of the fittest is the inexorable law of the business world. Even if a manufacturer is satisfied with his yearly profit, which his balance sheet shows, he should know on which particular products he is making the most profit and on which he is making only a narrow margin of profit or losing money. Intelligent costing would enable him to distinguish between the profits on different products, to discontinue the manufacture of products sold at a loss, to limit the sales of products on a small margin of profit, and to give more attention to the manufacture and marketing of products on which the largest profits are realized.

Cost accounting is especially important for manufacturers with small or comparatively small captial, in order that they may meet the severe competition of those who manufacture on an extensive scale. As a rule, the large manufacturers have not only the most improved machinery and most efficient methods of production, but also very accurate cost-finding systems.

The comparatively small manufacturers have not been so slow in equipping their factories with up-to-date machinery and in adopting efficiency rules as they have been in planning a system by which they could know the actual costs of their different units of production. Any investigation of this matter which may be made will show that an amazing number of American manufacturers have practically no costing system, or only the crudest sorts of systems.

[a] This section, written by Walter B. Palmer, special agent of the Bureau of Foreign and Domestic Commerce, appeared in the Annals of the American Academy of Political and Social Science, September, 1915, pp. 165–173.

Most manufacturers know the cost of materials and the direct labor cost for each unit of production, but do not intelligently distribute the general expenses, or "burden," or, as it is commonly termed, the "overhead." Many of them add to the material and labor cost for each unit what they think, judging from past experience, the charge for overhead should be, and fix prices accordingly, but if they manufacture any variety of products, such guesswork will surely lead to a diminution of profits or to financial loss.

In recent years the profession of cost accounting has developed, but the small manufacturers, constituting much the larger number, have been much more backward than the large producers in adopting the methods of this branch of efficiency. They complain of the fierceness of competition, yet do not avail themselves of a costing system that would show on which articles they could meet competition and on which they could not. Perhaps the principal reason for this backwardness on the part of the small manufacturers is that they think they can not afford to pay the fees which are charged by efficiency experts for installing cost-accounting systems. A simple, inexpensive and yet accurate costing system is one of the crying needs of the small manufacturers to-day. Regardless of the expense of the installation of a scientific system by professional cost accountants, some of the systems are so complicated as to preclude their general use, because they are beyond the grasp of the ordinary small manufacturer.

Many small manufacturers employ as bookkeepers men, and often girls, whose accounting experience is so limited that they can scarcely prepare a profit and loss statement or an annual balance sheet, and who would be utterly unable to figure out an elaborate system of costing. And yet, simple, practicable systems can be adopted which come within the comprehension of inexperienced bookkeepers, and by means of which a satisfactory knowledge of the costs of different products can be obtained.

There are two elements of cost—raw materials and direct labor—which can be ascertained for different units with close accuracy, and these are usually the largest elements. Almost any manufacturer knows just how much raw material is used in any unit, and knows the cost of the direct labor. If he pays his employees on the piece-price basis, he knows the cost of the direct labor per unit exactly. If the direct labor, or part of it, is paid on the time-rate basis, he generally knows, from records of production, the average time required by his employees to produce a certain unit. Knowing the cost for materials and for direct labor, the problem is to find the proper burden for general expenses to apportion to each different unit. This is the great stumbling block in the way of a large number of manufacturers.

There are three systems of costing, all of them simple, which are more or less used. They may be designated the quantity method, the direct-labor method, and the prime-cost method.

THE QUANTITY METHOD.

By this method the total general expense during the preceding business period—that is, all expense except for raw materials and direct labor—is divided by the number of units produced, and the

quotient is added to the cost of materials and direct labor for each unit. This may be expressed as follows:

$$\frac{\text{Burden, last period}}{\text{Number of units produced}} = \text{Amount of burden per unit.}$$

If, for instance, during the last period the entire cost of manufacturing and selling were $100,000, and the raw materials cost $50,000, and the direct labor $30,000, the burden amounted to $20,000. If, therefore, 10,000 units were produced during that period, the burden for each would be $2. Of course, the amount for raw materials used in the computation must be the amount actually used during the last business period, and not the amount purchased, which may be more or less, and this requires that there should be inventories of raw materials at the beginning and end of the period. The account for raw materials—that is, materials used in the unit—should be kept distinct from factory supplies.

This method of costing is the simplest of all methods, and where only one kind of goods is manufactured it is the most accurate of all systems. A concern that manufactures only one kind of typewriter, for instance, would not need a more perfect system, but obviously this method is very defective if applied in a factory where goods of varying values are produced.

THE DIRECT-LABOR METHOD.

By this method the burden charge is made on the basis of the cost of the direct labor for the unit, in the proportion of the total cost of direct labor to the total amount of burden during the preceding period. This may be expressed as follows:

$$\frac{\text{Burden, last period}}{\text{Direct labor pay roll}} = \text{Per cent of burden per unit.}$$

If during the last period the total direct-labor cost amounted to $30,000, and the burden to $20,000, a charge of 66.67 per cent of the direct-labor cost of the unit should be made for burden; that is, should be added to the cost of materials and direct labor for the unit.

Where units are produced which differ in labor cost, this method is much more accurate than the quantity method, but it is defective where raw materials of different values are used in different units, for the reason that under it the more expensive grades of goods would not carry their proper proportion of burden.

THE PRIME-COST METHOD.

By prime cost is meant the sum of the cost of raw materials and of direct labor. By this method the burden charge is made on the basis of the sum of the cost of raw materials and direct labor for the unit, in the proportion of the total cost of raw materials and direct labor to the total amount of burden during the preceding period. This may be expressed as follows:

$$\frac{\text{Burden last period}}{\text{Raw materials plus direct-labor pay roll}} = \text{Per cent of burden per unit.}$$

If during the last period the cost of raw materials amounted to $50,000, the cost of direct labor to $30,000, a total of $80,000, and the burden amounted to $20,000, a charge of 25 per cent ($20,000 ÷ $80,000) of the prime cost of the unit would be made for the burden, that is, should be added to the prime cost.

This method provides for the distribution of the burden on the unit much more accurately than the quantity method, where materials of different values are used in different units, or where more labor is employed on some units than on others; and this method is more accurate than the direct-labor method, where materials of different values are used. In costing by any method a charge should be made against the cost of the unit to cover the average loss from waste and seconds.

Any of the three methods which have been described is easy of application, even by clerks who have little accounting experience. Another method is, however, recommended as more accurate and nearly as simple. For want of a better designation it may be termed the "dual method."

THE DUAL METHOD.

The prime-cost method is accurate for computing the burden on units which vary in the cost of materials and the cost of labor only when during the last business period the value of the products equaled the amount of the net sales. There would be an inaccuracy if the net sales amounted to more or less than the production, because the burden for the cost to sell should be computed on the amount of the net sales and not on the production.

By the dual method the ratio of burden for the unit is computed on the prime cost, during the preceding period, for indirect labor and for factory expense, because these portions of the burden are related to the amount of the production, but the selling expense is computed not on the amount of production but on the amount of the net sales. The ratio of burden for administrative expense is also computed on the amount of net sales as the base, because administrative expense is perhaps more nearly related to the amount of net sales than to the value of the production, though this may differ in different industries.

If, for example, the expenses during the last period were $50,000 for raw materials, $30,000 for direct labor, $4,000 for indirect labor, $3,000 for factory expense, $6,000 for administrative expense, and $7,000 for selling expense, making a total of $100,000, but if the net sales amounted to $110,000, the percentage of burden for the unit would be computed as shown in the following illustration:

Expenses, last period:		
Raw materials	$50,000	
Direct labor	30,000	
Prime cost	80,000	Per cent of burden for unit.
Indirect labor	4,000	5.00 ($4,000 ÷ $80,000).
Factory expense	3,000	3.75 ($3,000 ÷ $80,000).
Administrative expense	6,000	5.45 ($6,000 ÷ $110,000).
Selling expense	7,000	6.36 ($7,000 ÷ $110,000).
Total	100,000	
Net sales	110,000	

These percentages are used to find the burden for a unit which is intended to be sold at $10, for instance, and the cost of which for raw materials was $4.25 and for direct labor $2.55, as illustrated below:

Raw materials	$4.25	
Direct labor	2.55	
Prime cost	6.80	
Indirect labor	.34	(5 per cent of $6.80).
Factory expense	.255	(3.75 per cent of $6.80).
Administrative expense	.545	(5.45 per cent of $10).
Selling expense	.636	(6.36 per cent of $10).
Waste	.043	(e. g., 1 per cent of $4.25).
Seconds	.068	(e. g., 1 per cent of $6.80).
Total cost	8.69	
Profit	1.31	(13.1 per cent of $10).
Selling price	10.00	

As a matter of fact, most goods are manufactured to sell at certain prices, which are determined in advance, and if the specifications for raw material and for labor are found to be too high to allow a fair profit at the determined price, cheaper material or less labor is used.

The dual method may be varied by basing the percentage of burden for indirect labor and factory expense on the direct labor-cost instead of the prime cost, and it is claimed that for some industries, where the materials used differ but little in cost per unit, this modified method is more satisfactory.

In order to compute the burden by the dual method, accounts should be kept for the foregoing mentioned items, and they may be subdivided as follows:

Raw materials.
Direct labor:
- Wages of all employees in manufacturing occupations.
- Paid to contractors.
- Paid to home workers.
- Total direct labor.

Indirect labor:
- Salaries of officials, chargeable to manufacturing.
- Wages of factory superintendent and foremen.
- Wages of designers.
- Wages of employees in sample department.
- Wages of other general help—machinist, clerks in factory (not general office), floor boys and girls, etc. (not including engineer and fireman).
- Total indirect labor.

Factory expense:
- Rent of space used for manufacturing and shipping departments.
- Power, heat (or fuel and wages of engineer and fireman), light, and water.
- Repairs on equipment.
- Depreciation of equipment.
- Fire insurance.
- Workmen's compensation or employers' liability.
- Welfare work.
- State, county, township, and municipal taxes.
- Other factory expense.
- Total factory expense.

Cost of administration:
- Salaries of officials, not chargeable to indirect labor or cost to sell.
- Salaries of general office force and auditor.
- Rent of general office.
- Office supplies, stationery, postage, telegrams, telephones.
- Insurance—other kinds than fire.

Cost of administration—Continued.
- Expense of collection and legal service.
- Bad debts.
- Corporation tax.
- Other administrative expense.
- Total cost of administration.

Cost to sell:
- Salaries of officials, chargeable to sales department.
- Salaries, commissions, traveling, and general expense of salesmen.
- Wages of other employees in sales department.
- Rent of showroom.
- Packing materials.
- Cartage and freight outward.
- Advertising.
- Other selling expense.
- Total selling expense.

Waste and seconds:
- Loss from waste.
- Loss from seconds.
- Total.

Such accounts can be kept very easily, if a specially ruled book is used. Some of the items under factory expense might not improperly be entered under cost of administration, their placement being a matter of opinion, but as these items are usually small, the result in computing the burden on a unit would be little, if any, affected by a transfer of them from one account to another.

In computing the proportion of burden for the unit on the basis of production and net sales during the preceding business period, the results would be more accurate if the profit and loss statement were made semiannually instead of annually, and still more accurate if such a statement were made quarterly. In making computations by any method it should be borne in mind that the cost of materials and direct labor, while usually the largest elements of cost, are those which are most liable to fluctuation, and in calculating the burden on the basis of the last period, the differences in the cost of materials and direct labor at that time and at the time the computation is made should be taken into consideration.

When a manufacturer gets out new styles he must be particularly careful in costing if all or any part of the direct labor is paid on the time-rate basis. In making up samples for salesmen to take out on the road he should make time studies of the several direct-labor operations to ascertain as nearly as possible the direct-labor cost per unit. When the goods to fill the first orders received are manufactured, he should check up his first computation by the cost to manufacture in quantities, and if there is a difference, he should adjust the selling price per unit accordingly. If it should happen that his price for goods of a certain style, as given to the salesmen, is too low to afford a profit, the earlier he checks up his first calculation of the cost for that style the less money he will lose.

While all of the methods of costing which have been described are comparatively simple and inexpensive, and while for most factories one of these methods would be found entirely practicable and satisfactory, it is not claimed that for a highly organized factory, with many departments, any of these methods would be as accurate as one which would be adapted to the particular needs of the plant, and which might be devised by cost-accounting experts after a complete, careful study of the factory conditions.

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In a highly organized establishment the departmental method of apportioning burden should be adopted. Certain burden charges should be made against the whole production of the factory, certain charges against the production of particular departments only, and other charges in part against the production of the whole factory and in part against the production of particular departments. If a cotton mill, for instance, sells both yarn and cloth, the factory expense for the weave room or for the cost of indirect labor in that room should not be made a part of the burden on the product of the spinning room. In a printing plant the product that is printed only should not be charged with the expense for the bindery department.

ACCOUNTING CONDITIONS.

The following table indicates the character of factory management, the frequency with which inventories are taken, and other data in the establishments that were visited by the agents of the Bureau during this investigation. The data regarding the method of apportioning overhead in computing the costs of units and the data regarding the frequency of inventory taking are presented as they were reported by the establishments. The statements regarding accounting methods were made by the agents themselves and were based on their own observations.

TABLE 48.—COST-FINDING AND ACCOUNTING METHODS.

GROUP I.—NO OPERATING CONTRACTED (8 ESTABLISHMENTS, 4 NOT REPORTED).

Methods of apportioning overhead.	Other accounting conditions.	Frequency of raw material and general inventories.
Prime-cost method	Good	Annual.
Do	Has ledger accounts for labor, rent, power, taxes, insurance, freight in, freight out, stable, traveling expense, discount, interest, returns, collection charges, office, bad debts, and other items which are brought directly into the profit and loss statement.	Do.
Do	Fair. The main items are included in general expense.	Semiannual.
Total expense per week for each department is divided by the number of garments produced, and each garment is charged with its share of expense. This plant makes practically only 2 kinds of suits and 2 kinds of overcoats, and employs about the same force all the year.	Good	Annual.
Not reported	....do	Do.
Unit costs are computed on sales instead of the product.	An auditing concern each year makes analyses of cost and of profit and loss.	Perpetual physical semiannual general inventory.
Quantity method	A daily record of production and cost is kept. An accounting concern each year makes analyses of cost and of profit and loss.	Semiannual.
Shop and manufacturing overhead are found by dividing the average weekly expense by the average weekly production. General overhead is computed on the basis of net sales.	Not reported	Annual.

TABLE 48.—COST-FINDING AND ACCOUNTING METHODS—Continued.

GROUP II.—PART OPERATING CONTRACTED (27 ESTABLISHMENTS, 3 NOT REPORTED).

Methods of apportioning overhead.	Other accounting conditions.	Frequency of raw material and general inventories.
It is estimated that the cost of raw material and direct labor does not exceed 66⅔ per cent of the gross selling price. The cost of direct labor is ascertained by dividing the monthly summaries of labor pay rolls of departments by the production of the departments.	Inadequate. Items are condensed into a merchandise account, which contains manufacturing cost, interest, and discount, and a general expense account, which covers so varied a list of expense items that accurate data were difficult to obtain.	Annual.
A theoretical per cent is added for overhead.	Not reported	Semiannual.
Prime-cost method	An auditing company makes a thorough audit each year.	Annual.
Cutting room and shop expenses apportioned by the quantity method.	A great many items are bunched under "General expense," such as rents, office expense, pay rolls, salaries of salesmen, packing, etc. The distribution of costs for various materials used in the garments is good.	Semiannual.
Prime-cost method	The general ledger has a fine classification of accounts, and from it can easily be procured statements showing actual conditions. The management can tell at 4 o'clock every evening exactly what each department is doing, as compared with a set standard.	Annual.
10 per cent is added to the prime cost for factory burden. An arbitrary per cent is added also for selling cost.	Has excellent cost record, but the general books of account are not well designed to show important information.	Do.
On the basis of gross sales for the past year, and the gross selling price of the unit.	Good	Annual raw material; perpetual general.
Not reported	The general bookkeeping system is very much out of date; ledger accounts are too condensed to be useful for practical purposes.	Annual.
Shop expense is distributed by the quantity method. General overhead is apportioned by a system not explained.	No great detail is kept and accounts require much analysis.	Do.
Ten per cent is added to the gross cost of the unit.	Not reported	Do.
12 per cent for factory and 8 per cent for selling expense are added; based on the selling price of unit.	Good. Much better than the cost-finding system.	Do.
Departmental method	Unusually good	Perpetual raw material; semiannual general.
Not reported	General accounts are too condensed. Merchandise account covers everything relating to the debit or credit or sales of material.	Annual.
The rate for manufacturing overhead is found by dividing the total general expense for the year by the value of the product. For other overhead 10 per cent is added.	Good accounting system	Semiannual.
Not reported	Modern accounting method. A very efficient concern both in manufacturing and office.	Do.
Prime-cost method	Very good system of bookkeeping	Perpetual raw material; semiannual general.
15 per cent added to the prime cost	Has a good general bookkeeping system, with a wide classification of accounts.	Annual.

TABLE 48.—COST-FINDING AND ACCOUNTING METHODS—Continued.

GROUP II.—PART OPERATING CONTRACTED (27 ESTABLISHMENTS, 3 NOT REPORTED)—Continued.

Methods of apportioning overhead.	Other accounting conditions.	Frequency of raw material and general inventories.
Prime-cost method	Excellent accounting system employed in the office; splendid stock inventory.	Perpetual.
Do	Not reported	Do.
Firm makes one-price garment. The overhead is based on selling price.	Good accounting system	Annual.
Based on cloth cost, as the labor cost on all garments is about the same.	Experts installed a cost-finding system, which is revised from time to time to suit changing conditions. An auditing company makes an audit each year and offers suggestions in regard to changes.	Semiannual raw material; annual general.
40 per cent is added to the expense for materials, labor, and shop overhead for general overhead and profit.	Excellent accounting system	Semiannual.
Practically no cost-finding system	Has a fair set of general books of account.	Annual.
Direct labor method	Not reported	Do.
Prime cost method, but the cost-finding system is inadequate.	Good general accounts	Do.
Not reported	Excellent accounting system	Not reported.
Shop expenses are apportioned on the basis of production for the different shops. To the cost of materials and labor in the shops, and other shop expenses, is added 40 per cent for general overhead and profit.	Separate accounts are kept for many items of general expense which formerly were grouped under one head.	Semiannual.

GROUP III.—ALL OPERATING CONTRACTED (22 ESTABLISHMENTS).

Overhead on units is based on per cent of sales during previous year.	Poor accounting system	Annual.
Using the selling price as a base, it is estimated that a profit can be made if the labor and material (prime cost) are $1.50 less than the cost of materials and labor. Thus if a suit is sold at $8, $6.50 worth of materials is put into it.	The classification of accounts is excellent. Practically the exact classification of items of expenditure shown on the Bureau's schedule is made in the cash book, totaled for the month, and accumulated to the end of the period; each item being separately charged off to the profit and loss account in a private ledger.	Do.
Overhead charges are not computed on units.	Has an excellent analysis of accounts	Do.
For general overhead 10 per cent of prime cost is added, and for selling 5 per cent, a total of 15 per cent of prime cost.	The general accounts are much condensed and give little practical knowledge, but subsidiary records give a certain amount of useful information.	Do.
Computed on the selling price	Very good accounting	Do.
18 per cent is added to the prime cost	Accounts are very much condensed. Expenditures are charged to two main ledger accounts, "Manufacture" and "Expense."	Do.
Prime-cost method	Good accounting	Do.
Do	Poor accounting system	Semiannual.
Do	Accounting records are of a primitive character.	Annual.

TABLE 48.—COST-FINDING AND ACCOUNTING METHODS—Continued.

GROUP III.—ALL OPERATING CONTRACTED (22 ESTABLISHMENTS)—Continued.

Method of apportioning overhead.	Other accounting conditions.	Frequency of raw material and general inventories.
Computed on gross sales	Not reported	Semiannual.
20 per cent is added to the prime cost, 10 per cent for manufacturing, and 10 per cent for selling.	do	Do.
Computed on amount of yearly sales	Modern methods are employed in the bookkeeping and credit departments.	Annual.
Sales for the year are divided by the total expense.	Good accounting	Do.
Prime-cost method	do	Semiannual.
To arrive at the selling price, 33⅓ per cent is added to the prime cost.	Efficient general bookkeeping	Annual.
Based on amount of year's sales	Render a semiannual balance sheet and accountant's statement.	Semiannual.
Based on the gross selling price	An accountant makes an analysis of the year's business.	Annual.
Prime-cost method	Very good accounting	Do.
Use experience only	Good accounting conditions	Do.
Overhead charges are not computed on units.	Very good accounting	Semiannual.
Percentage of overhead is found by dividing the general expense of past year by estimated sales.	Not reported	Annual.
Prime-cost method	Has a well-planned set of general bookkeeping records. A subsidiary record gives the distribution of each account in great detail.	Do.

It will be observed that the favorite method of computing overhead charges on the cost of units was the prime-cost method, but various other methods were used, some of which were crude and arbitrary.

Of the 59 establishments that reported as regards the frequency of taking inventories, 5 kept perpetual inventories of their raw material, 15 took semiannual inventories of raw material, and 39 took them annually; 4 kept perpetual general inventories, 16 took general inventories semiannually, and 39 took them annually.

Irrespective of the cost-finding methods, the accounting systems of many manufacturers are imperfect. Some establishments have up-to-date accounting systems, and some employ an auditing concern once a year to prepare a profit and loss statement and a balance sheet, but many establishments have very poor bookkeepers, who keep the accounts in such a way that important information is not shown.

TRUE COSTS AND HOW TO FIGURE THEM.[a]

When I received the invitation to address your convention regarding the factors that go to make up true costs in the clothing industry, I thought of some conversations I have had on this subject with clothing manufacturers. I have found a tendency to regard "cost keeping" as a matter of minor importance that might well be handled

[a] Read by Kenneth E. Clarke, of Chicago, before the convention of the National Association of Clothiers held at Atlantic City, N. J., June 1-2, 1914, and published in the Manufacturing Clothier, official organ of the National Association of Clothing Designers, June, 1914.

in spare moments by clerks that were not busily engaged in checking and entering three-sheet orders or in sending out monthly statements of accounts. Clothing manufacturers have sometimes told me that at best "cost" figures represented ancient history, that the merchandise sold was sold either at a profit or without one, and that was the end of the matter. It has been more than hinted to me that post-mortems were not the most pleasurable or profitable activity connected with the manufacture and sale of clothing.

I therefore take great pleasure in addressing the members of your association upon this subject, and I hope to indicate some phases of "cost keeping" that are so vital to the business success of each and every one of you as to repay you in part for listening to what must be in some ways a most prosaic subject.

My argument for the importance of correct cost keeping in the clothing industry rests upon the fact that every dollar's worth of ready-to-wear clothing sold to-day is sold far in advance of its manufacture, and that the selling price of each lot must be determined before the salesmen go out each season. To set these selling prices so as meet competition, maintain quality in manufactured merchandise, and still realize a reasonable profit upon money invested is the chief end of man, in the clothing industry at least.

When the season's orders have all been taken and manufacturing operations have commenced, it is of the greatest importance to know day by day and week by week that your actual performance is up to the efficiency standard set by your cost estimates upon which selling prices were based. I will grant you freely that a cost system operated without regard to estimates or efficiency standards is a dead affair, but in the clothing industry at least your cost system should be as interesting as business troubles in a newspaper, and as up to date.

Estimated costs show what you wish to accomplish, actual costs tell you what you have accomplished, and the two together point the way toward what may be done in the future to eliminate wastes, improve the quality of merchandise, and add to your profits.

There is no standing still in the clothing industry. You must either go ahead or fall back in the race for supremacy. It is worth your while to use all practicable and tested instruments and methods that can help you to success. In the adventurous days of Columbus, many ships set sail without charts or compass, and some of them arrived in port. You would not care, however, to accept this as a precedent to-day for sailing for Europe on a modern vessel from which charts, compass, and wireless had been removed. Speed is much more important now than in the old days, the number of passengers and value of the cargo much greater, and any disaster of more consequence. In the same way many a clothing business succeeded in the past, and for a certain time without systems, statistics, or cost figures. Because this has been done in the past is no reason for trying to do it now, in the face of much keener competition, armed with all the modern weapons of efficiency.

The elements of a modern cost system from which accurate cost estimates may be prepared and actual costs figured are:

First. A systematic and accurate method of predetermining the yardage of piece goods and trimmings used for each suit and overcoat model cut.

Second. Some method of collecting the detailed labor operation costs of cutting and making, and of adding thereto the correct amount necessary to take up accurately manufacturing and shop expense.

Third. The third element of a modern cost system is a method for determining the percentage necessary to add to this production cost in order to cover selling, advertising, and general expenses and to provide the necessary profits of the business.

Fourth. A fourth element is a system of preparing detailed cost estimates from this information from which the selling prices of the merchandise may be set.

Fifth. There must be a system for figuring cutting-ticket costs during the manufacturing season which will enable the manufacturer to tell beyond the shadow of a doubt where he has succeeded in meeting his estimates and where he has failed. This information is vital if errors in setting selling prices are to be corrected and mistakes avoided in the future.

This system will include the criticism of each cutting ticket that figures a certain per cent above or below the estimated cost. It is only thus that the manufacturer can keep his cost figures accurate and maintain accuracy in the reporting of piece goods and trimmings used in manufacture. The figuring of every cutting-ticket cost is also the surest way of finding out whether or not the right piece goods and trimmings are being used, and the work being given out to the right shop, according to the estimates upon which the selling prices were set.

The "actual cost" system must include a series of weekly and monthly reports upon the operation of the cutting room, manufacturing department, and shops, from which

the actual efficiency of these departments may be compared with their estimated efficiency and the necessary adjustments obtained to gross profit and loss figures.

The sixth and last element of a modern cost system is a profit-figuring division of the cost department, which will furnish the sales department with monthly summaries of profit and loss on all merchandise charged, by merchandise classifications, ranges, and salesmen. It is only through the knowledge gained by such figures of profit and loss that you can plan to meet competition intelligently, tell where you are making your profits, and what salesmen are selling the profit-making merchandise.

It is by the use of this machinery of efficiency that you should find the greatest aid in selling your merchandise at a legitimate profit, in increasing the quality of your merchandise, and in adding to the net profits of the business through the elimination of all wastes and inefficiencies.

These same elements enter into both estimated costs and actual costs, and the two may be considered together.

The sum of materials used, productive labor, and manufacturing expense is called production cost. The work of the cost accountant is to predetermine this cost correctly and to prove his figures to be correct by the results of the actual cost system.

In the clothing industry materials used are piece goods and trimmings. To these are applied productive labor in the cutting room and shops, and to this must be added the manufacturing expense incurred.

I have found so many fundamentally incorrect cost-figuring methods in use in the clothing industry that it is difficult to enumerate them all. Without doubt the worst and most common practice is that of guessing at each and every item of cost through the use of so-called averages. Selling prices of entire lines are set upon figures for piece goods and trimming yardages that must be traditional in the clothing business, they are so old. Like most traditions, they are all wrong. There can be no such thing as an average cost, an average yardage, or an average making price when it comes to cost figuring. To use averages when you can easily get actual figures is to court disaster. If it is true that some clothing manufacturers in the East are satisfied with a profit of 50 cents on a suit, these manufacturers should figure every item of cost out to the last fraction of a cent. It would not take much to convert this profit into a loss which could easily be disastrous.

Another bad practice is that of figuring the cost of piece goods and trimmings at list prices, in the hope that the discount you take on these materials will offset the discount your customers take on finished merchandise. The two never will offset one another, as a little figuring will prove. By taking piece goods and trimmings into your costs at list you simply falsify both your manufacturing cost and your general overhead percentage.

The addition of various sums to cover contingencies of one kind or another, or simply to play safe, is another bad feature of cost figuring in the clothing industry. Every item of cost, including wastes of various kinds, can be predetermined. By adding a little here and there to your costs you simply run them up beyond all reason, confuse everyone who tries to make use of your cost figures, including yourself, and show a smaller paper profit than you actually make, because part of your profit is in these hidden charges. This, too, is a traditional method of figuring in the clothing industry, but it is a poor way, unless you actually hate to know just how much money you are making or losing. Sometimes I wonder if this may not actually be the case. * * *

One last point: When we speak of making a profit of 6 per cent we always mean a profit of 6 per cent on sales. On a million-dollar business this would amount to $60,000 profit. A manufacturer who wants to make 6 per cent and who adds this amount to his cost price is making a very bad mistake. The total productive cost of a million-dollar business might be somewhere around $750,000. Six per cent of this amount is only $45,000, or 4½ per cent on the sales, instead of the 6 per cent figured on.

This kind of figuring is hard on the manufacturer who figures on making a legitimate profit, and in the long run harder still on the manufacturer who figures in this way.

So long as your selling prices are below your competitors' you can find a market for your merchandise. Your customer does not care if you give him a suit that cost you $10 for $9, but when you do this you are working to make your customer rich and "going broke" yourself. This may be magnificent, but it is not business, and it is this kind of competition that is the curse of the clothing business.

Rather than tell you of the bad practices I have found in cost keeping in this industry, I am going to give you my idea as to correct methods, for figuring cost estimates and actual costs. If any of you disagree with the methods here advocated, I will be glad to answer any questions regarding them to the best of my ability.

I can not tell you how much money should be spent for piece goods, trimmings, and making in each suit or overcoat range. This is a matter that can only be decided by taking into consideration the line of merchandise you are selling, the demands of

your trade, the efficiency of your entire organization, and the profits you wish to make. It is difficult to be strong in piece goods, trimmings, and making in every range, although this is certainly the ideal to work toward. When you have decided how much money you can spend on piece goods, trimmings, and making on an average-priced suit and overcoat, you are ready to start getting up your estimate sheets. Make these estimates as detailed as possible. Working from the average-priced suit or overcoat, you will have to decide upon the approximate value that can be given in piece goods, trimmings, and making in each selling-price range. You will then get up estimates covering each model in accordance with your general plan. Do not be afraid of making these estimate sheets too detailed, and do not let the fact that you can not or need not set your selling prices in exact conformity with the estimated costs deter you from making these estimates as correctly as possible. It is a good thing to realize in advance that you can not make the same profit upon all classes of merchandise sold, and to have some idea in advance just where you are going to make and where you are going to lose. You must take some business at a small profit. On the other hand, you may be able to realize more than an average profit on other classes of merchandise on account of their novelty, attractiveness of design, or other quality which makes them of especial value. One thing is certain about both estimated and actual cost figures—you can not change them to suit your own wishes without destroying their value to you as standards from which to work.

The cost of piece goods, trimmings, and findings should be always figured on a basis of net cost plus the freight. There is no reason in the world for taking these costs at list prices and equalizing the materials bought on a net basis. Get the exact yardage used for each model by having test lays made of piece goods, coat linings, sleeve linings, vest backs, and vest linings. In figuring the cutting-ticket costs you can obtain the exact yardage used, priced at the exact net cost per yard paid for the piece used. Have test lays made of all findings, using lays for at least 12 garments and reducing the figures to a cost per garment on the estimate sheets. Do not forget that you may obtain efficient figures on test lays and very inefficient results in the cutting and trimming rooms on actual production. This fact should make you very much interested in some method for controlling the yardage used of piece goods and trimmings under actual working conditions.

A certain percentage must be added to the cost of all piece goods in your estimates to cover loss in the sponging room through shrinkage. I have seldom found this matter of shrinkage handled correctly, and it is indeed a difficult matter to determine what percentage to use unless you have better records from the sponging department than are kept by most houses.

In preparing cost estimates of cutting and making labor you are preparing figures that must be used in figuring your cutting-ticket costs also, and corrected by the weekly operation reports from the cutting room, manufacturing department, and shops. It would be quite possible to figure from each cutting ticket the cost of the direct cutting-room labor applied on the ticket, but as it is wholly impossible to figure the exact cost of the indirect items of labor applied in the other divisions of the manufacturing department, I have always preferred to figure a schedule cost for suits and overcoats, using this schedule in estimates and cutting-ticket costs. This schedule involves the cost of the work done in the cutting and trimming rooms, the charge for the designer's salary, wages of grader and paper cutters, the salaries and wages of the piece goods examining and sponging room, busheling and final examining departments, and the salary of the superintendent, his assistant, and the clerks in the manufacturing-department office. To this labor cost must be added the proper charges to cover expense items, such as taxes, insurance, rent, depreciation on machinery and fixtures, heat, light, and power, as well as the miscellaneous expenses chargeable to the departments named.

The last item to be obtained in order to get the production cost is the cost of making the coat, pants, and vest. Here, too, the figures prepared for estimated purposes must be used in figuring cutting-ticket costs, and here, too, the weekly operating reports from the shops furnish the necessary adjusting figures to show you the difference between your estimated and actual shop efficiencies. In getting up making estimates you should get from each shop foreman a detailed schedule of prices paid for each operation on each model that will be made in his shop.

You have organized your shops to produce garments of a certain quality at a certain price. If you fail to obtain your estimated efficiency here, you stand to lose a great deal of money in a very short time. * * *

While on the subject of expense charges I should like to emphasize the necessity for clear and correct classification of all expenses. I have been told many times that it did not matter much whether a certain expense was charged to general or to manufacturing cost—that it was only a case of changing money from one pocket to another. This is a mistake that may cause a great deal of trouble. Manufacturers of clothing are engaged in many varied activities. It is quite possible to be a very capable distributor and a very poor manufacturer, or vice versa. It is only by means of correct classifications that you can judge as to your efficiency in any given department. It is only through the correct classification of expense that you can hope to obtain correct figures of gross profits by merchandise classifications, or to reduce in any scientific manner the overhead charges that the business is now carrying.

I have been asked many times to name a normal percentage on sales to cover selling, advertising, and general expense; also what ratio shop expense should bear to shop productive labor. These questions can not be answered in general, owing to the absolute lack of uniform accounting methods in the clothing industry. It ought to be well worth while for your association to take up this matter with the view of recommending some uniform method of classification to your members. This would be taking a long step toward a general increase in the clearness and usefulness of the statistics prepared by your accountants.

Right here I should like to make a plea for the theoretical accountant. Accounting can not be picked up by practical experience unless the experience happens to be with people who possess a theoretically correct system of accounts. A good ledger clerk or a good cashier is by no possible stretch of the imagination a good accountant, unless his experience has been supplemented by special instruction along accounting lines. Far greater harm results from unintelligent accounting than from dishonest accounting. It has been said, and I have found it to be true, that in practical affairs unintelligent accounting is the rule and dishonest accounting the exception. In hiring an accountant do not be afraid of the word theory. There is plenty of practical ability in the clothing business. A little theory will do no harm. It will be no great loss if your accountant does not know a wigan from an undercollar, but it will be a great loss if he does not know the difference between a trial balance and a balance sheet.

To return to the figuring of overhead charges on production cost. It is usually safe to take the records for the previous year in arriving at the percentage to cover selling, advertising, and general expense charges, unless you happen to be planning on changes which will result in an obvious increase in some of these expenses. In getting up the figures do not forget depreciation charges, administration allowances, loss on bad accounts, or interest and discount charges. Be sure to include the correct proportion of service charges, such as rent, taxes, insurance, light, heat, power, etc. In general, expense charges include all expense chargeable to the credit department, general office, accounting and statistical department, woolen office, and finished-stock departments.

Some of you may be interested in knowing about how much it should cost to maintain a department devoted to the preparation of cost estimates, actual cost figuring, the preparation of weekly and monthly manufacturing-department and shop-operation reports, the analysis and preparation of monthly reports of selling, advertising, general, manufacturing, and shop expenses, the figuring of monthly gross profits by merchandise classifications and salesmen, and the preparation of all statistics and general accounting statements. Such a department should be in charge of a good man, responsible only to the management for results. This man should be directly in charge of the preparation of cost estimates. Two girls can figure all the cutting-ticket costs for a $3,000,000 business. Another girl can prepare and figure all weekly and monthly operation and expense reports. Two more can handle the profit-figuring work. Taken altogether the cost of such a department should not exceed $5,000 a year for a $3,000,000 business, and the results should be worth many times that amount. * * *

CHAPTER VII.

SELLING CONDITIONS.

SELLING EXPENSES.

Table 49 shows, by establishments, the percentage of manufacturing profit and final profit and the percentages of the various items of selling expense based on net sales.

On the schedules secured from the 64 establishments shown in this table selling expense was divided into the following items:

Salaries of officials charged to sales department includes the salaries of officials or partners in charge of selling, or the portion of salaries distributed according to the amount of time devoted to selling. Salaries, commissions, and general traveling expense includes the salaries, traveling expense, and commissions of salesmen directly engaged in selling to the trade. Wages in sales department includes the wages of employees in this department not actively engaged in selling. Rent charged to sales is rent paid for showrooms, sales offices, etc. Freight and express charged to selling include only carrying charges on prepaid shipments to customers. Advertising costs charged to selling are only such costs as bring the merchandise to the notice of the public or the trade, and do not include advertising for help. Cases and other shipping materials include costs for all materials used in packing and shipping goods. Other selling expense is made up of all costs chargeable to selling not included in the divisions of cost already enumerated.

It will be noted that in nearly all instances the per cent of cost in the various subdivisions of selling expense is somewhat higher for Group I, with no operating contracted, than for Group II, with part of operating contracted, and considerably higher than Group III, with all operating contracted. This is explained by the fact that Group I embraces establishments which turn out very high-grade clothing, and on account of the nature of their product have higher selling expenses. This also applies to Group II, composed of establishments manufacturing high and medium priced merchandise. Clothing of this description, on account of distinctiveness of style and quality necessary to attract an exclusive trade, must be extensively advertised, more expensive salesmen are required to market the product, expenses for showrooms and sales offices are necessary, packing and shipping expenses are greater, and other selling expenses are proportionately high.

Group III is made up of establishments which contract all operating and have a low-priced product. Consequently they do little advertising, and in most instances their other selling expenses are small in proportion.

TABLE 49.—PERCENTAGES OF MANUFACTURING PROFIT AND FINAL PROFIT AND OF VARIOUS ITEMS OF SELLING EXPENSE BASED ON NET SALES.

GROUP I.—NO OPERATING CONTRACTED.

Establishment.	Salaries of officials charged to sales department.	Salaries, commissions, and general traveling expense.	Wages in sales department.	Rent chargeable to sales.	Freight and express outward.	Advertising.	Cases and other shipping materials.	Other selling expense.	Total selling expense.	Per cent of manufacturing profit.	Per cent of final profit.
No. 1	3.11	3.88	.....	0.24	0.32	0.10	0.30	0.27	8.22	12.78	11.20
No. 2	1.64	3.70	0.52	.08	.27	.24	.23	.34	7.32	4.95	4.45
No. 3	1.12	5.75	.....	.28	.55	.08	.38	.22	8.41	6.79	6.05
No. 4	2.10	1.50	.....	.02	.20	.07	.11	.....	4.09	6.50	5.96
No. 5	1.57	2.58	.....	.05	.26	.....	.15	.27	4.68	5.24	4.74
No. 6	1.35	3.05	.....	.....	.28	.21	.15	.....	5.04	4.61	3.13
No. 7	1.93	6.87	.63	.53	.42	.89	.32	.45	12.04	1.92	3.13
No. 8	1.57	4.36	.45	.46	.28	.04	.14	.87	7.79	3.34	2.19
No. 9	1.53	2.86	.56	.23	.28	1.51	.64	.51	8.43	7.15	6.48
No. 10	.72	6.97	.63	.56	.20	2.28	.21	.84	12.01	1.52	a3.23
No. 11	1.17	6.95	.10	.06	.23	4.94	.16	1.28	14.91	5.87	5.74
No. 12	.35	6.96	.57	.08	.23	.75	.21	.30	9.48	8.83	8.61
Average for group	1.19	5.31	.39	.23	.27	1.52	.26	.59	9.76	5.66	4.67

a Loss.

TABLE 49.—PERCENTAGES OF MANUFACTURING PROFIT AND FINAL PROFIT AND OF VARIOUS ITEMS OF SELLING EXPENSE BASED ON NET SALES—Continued.

GROUP II.—PART OF OPERATING CONTRACTED.

Establishment.	Salaries of officials charged to sales department.	Salaries, commissions, and general traveling expense.	Wages in sales department.	Rent chargeable to sales.	Freight and express outward.	Advertising.	Cases and other shipping materials.	Other selling expense.	Total selling expense.	Per cent of manufacturing profit.	Per cent of final profit.
No. 13	1.30	7.67	.....	0.22	0.20	1.21	0.11	0.19	10.90	2.01	0.49
No. 14	1.06	8.24	.....	.14	.04	1.19	.13	.....	10.80	5.20	4.32
No. 15	1.28	5.98	0.40	.16	.14	.21	.09	.01	8.27	a.40	a1.15
No. 16	.....	8.60	.....	.....	.34	.41	.....	.....	9.35	2.23	2.04
No. 17	.61	2.22	.62	.26	.20	.37	.21	.20	4.69	5.03	5.01
No. 18	.28	12.08	.....	.13	.48	.30	.23	.91	14.41	a1.10	a1.43
No. 19	1.06	1.05	.....	.26	.17	.09	.16	1.00	3.79	6.09	6.00
No. 20	.71	7.63	.....	.13	.20	.36	.22	.08	9.33	5.79	4.97
No. 21	1.79	3.57	.....	.63	.14	.81	.13	.....	7.07	3.07	2.56
No. 22	1.24	1.26	.....	.21	.16	.11	.16	.10	3.24	6.89	6.35
No. 23	2.63	1.42	.....	.22	.17	.02	.18	.68	5.32	3.59	3.38
No. 24	.....	7.50	.17	1.11	.25	.27	.23	.....	9.53	3.25	2.89
No. 25	.27	2.85	.....	.05	.17	.....	.03	.26	3.63	8.28	8.18
No. 26	.60	5.92	.....	.23	.38	.22	1.28	.03	8.66	4.50	3.69
No. 27	.71	5.99	.....	.69	.51	1.70	.16	.....	9.76	6.51	4.50
No. 28	1.43	3.14	.....	.11	.24	.05	.20	.29	5.46	3.41	2.78
No. 29	.45	4.57	.....	.08	.34	.05	.18	.06	5.73	a.54	a1.03
No. 30	.48	7.02	.....	.23	.33	.43	.32	.21	9.02	3.11	1.86
No. 31	1.10	3.80	.14	.18	.29	.58	.16	.....	6.25	1.07	a1.46
No. 32	.....	1.13	.....	.05	.....	.....	.16	.12	1.46	7.33	5.41
No. 33	.68	4.89	.....	.02	.27	.05	.22	.....	6.13	6.91	5.86
No. 34	1.70	6.95	.14	.20	.35	1.77	.11	.45	11.67	3.74	2.57
No. 35	.14	5.95	.64	.19	.29	2.84	.....	.....	10.05	4.57	3.43
No. 36	.....	5.52	.49	.25	.29	2.59	.18	.36	9.68	a.77	2.56
No. 37	.39	5.40	1.82	.15	.10	1.53	.17	.....	9.56	a.27	1.41
No. 38	.70	6.21	.33	.35	.28	.88	.20	.91	9.86	5.41	5.35
No. 39	1.09	4.49	.....	.13	.30	1.21	.13	.52	7.89	3.41	5.62
No. 40	.38	4.64	.....	.02	.73	2.15	.15	.09	8.16	6.23	6.70
No. 41	1.45	3.38	.....	.05	.34	.64	.17	.48	6.51	7.68	7.25
No. 42	.....	3.97	.01	.02	.28	4.12	.14	1.05	9.59	10.57	10.29
Average for group	.67	4.70	.19	.15	.31	1.50	.18	.39	8.09	5.22	5.11

GROUP III.—ALL OPERATING CONTRACTED.

No. 43	0.89	4.94	.....	0.24	0.15	.....	0.38	0.23	6.83	5.79	5.52
No. 44	2.55	5.42	.....	.16	.24	0.15	.24	.47	9.23	a1.72	a2.79
No. 45	2.72	1.92	.....	.13	.21	.03	.08	.....	5.09	7.04	6.75
No. 46	.99	5.58	.....	.40	.16	.30	.06	.12	7.61	5.48	4.62
No. 47	1.88	3.17	.....	.09	.15	.94	.15	.37	6.74	4.71	3.92
No. 48	.72	7.72	.....	.14	.23	.....	.54	.24	9.59	3.80	4.10
No. 49	2.48	5.54	.....	.15	.17	.45	.16	.53	9.48	3.00	1.52
No. 50	.66	2.81	0.16	.05	.17	.05	.27	.20	4.37	6.59	5.88
No. 51	1.65	5.18	.....	.20	.34	.16	.27	.25	8.14	8.19	8.62
No. 52	.68	6.75	.42	.09	.39	.28	.19	.....	8.80	8.44	7.48
No. 53	1.00	7.09	.20	.19	.40	.08	.32	.40	9.68	2.08	1.48
No. 54	1.13	6.24	.....	.19	.26	.63	.18	.....	8.63	.04	a1.00
No. 55	.87	3.54	.64	.33	.04	.....	.10	.15	5.67	7.20	5.89
No. 56	1.22	5.39	.....	.07	.35	.03	.10	.06	7.22	6.20	6.19
No. 57	.55	3.82	.....	.05	.32	.....	.28	.....	5.02	3.74	2.65
No. 58	.67	.87	.....	.06	.13	.....	.11	.08	1.91	6.40	5.99
No. 59	.54	6.96	.....	.30	.24	1.66	.18	.36	10.24	8.07	7.04
No. 60	1.67	2.77	.....	.05	.28	.....	.09	.08	4.94	7.55	7.49
No. 61	.53	6.20	.....	.02	.43	.41	.26	.....	7.85	1.30	.89
No. 62	.62	2.94	.....	.02	.23	.02	.18	.42	4.43	9.57	8.46
No. 63	.74	6.23	.06	.11	.61	.24	.30	.05	8.34	2.13	2.50
No. 64	1.62	2.23	.....	.01	.25	.....	.13	.05	4.29	8.68	8.60
Average for group	1.09	4.29	.04	.09	.31	.23	.19	.14	6.39	5.89	5.50

a Loss.

The following table shows the percentage of selling expense and of profit of establishments that advertise nationally as compared with those that do not advertise nationally, the percentages being based on net sales:

TABLE 50.—PERCENTAGE OF SELLING EXPENSE AND OF PROFIT, OF ESTABLISHMENTS THAT ADVERTISE NATIONALLY COMPARED WITH THOSE THAT DO NOT ADVERTISE NATIONALLY.

	Number.	Salaries of officials.	Salaries, commissions, etc.	Advertising.	Other selling expense.	Total selling expense.	Manufacturing profit.	Final profit.
Group I. No operating contracted:								
Establishments advertising nationally	4	*Per ct.* 0.89	*Per ct.* 5.99	*Per ct.* 2.27	*Per ct.* 2.00	*Per ct.* 11.15	*Per ct.* 6.11	*Per ct.* 3.54
Establishments not advertising nationally	8	1.70	4.14	.23	1.31	7.38	4.90	6.63
Group II. Part of operating contracted:								
Establishments advertising nationally	9	.61	4.75	2.13	1.39	8.88	5.76	6.13
Establishments not advertising nationally	21	.76	4.63	.33	.90	6.62	4.20	3.21
Group III. All operating contracted:								
Establishments advertising nationally	1	.54	6.96	1.66	1.08	10.24	1.62	1.11
Establishments not advertising nationally	21	1.13	4.06	.13	.69	6.01	6.19	5.80
Total for all groups:								
Establishments advertising nationally	14	.67	5.09	2.14	1.51	9.41	5.70	5.41
Establishments not advertising nationally	50	1.05	4.30	.22	.85	6.42	5.24	4.87

The 14 establishments that advertise extensively had net sales of $33,263,418, as compared with net sales of $33,648,536 by 50 establishments that are not national advertisers, indicating that the national advertisers are considerably larger establishments than those advertising only to a limited extent.

The establishments in Group I and Group II are manufacturers of high and medium priced clothing, while the establishments in Group III turn out a low-priced product. The table indicates that in the opinion of manufacturers, high and medium priced clothing can better be marketed by means of extensive advertising than can low-priced clothing, as only one establishment in Group III, which represents the low-priced manufacturers, is nationally advertised.

In the total for all groups, the total selling expense for the 14 establishments that are national advertisers is 9.41 per cent, as compared with a total selling expense of 6.42 per cent for 50 establishments that do not advertise extensively. The 14 national advertisers also show a higher percentage of manufacturing and final profit than the 50 establishments doing limited advertising.

The total for all groups further shows that the 14 establishments advertising nationally have a higher percentage for salaries, commissions, traveling and general expense of salesmen, advertising, and other selling expense, than the 50 establishments doing limited advertising. However, the 50 establishments doing limited advertising show 1.05 per cent for salaries of officials apportioned to selling, as compared with 0.67 per cent for this item shown by the 14 establishments doing national advertising. The explanation of this condition is that the limited-advertising concerns are smaller and that officials or partners devote more personal time to actual selling and employ fewer salesmen, which is substantiated by the column showing salaries, commissions, traveling, and general expense of salesmen. In fact, it was ascertained that in some of the smaller establishments visited officials or partners were selling all or the greater part of the product.

SELLING METHODS.

The several methods of distributing men's factory-made clothing are as follows: By selling direct to the retail trade, by "tailoring to the trade," by "mail order," or by selling to jobbers. The bulk of men's factory-made clothing is sold direct to retail stores. In order to reach this trade the manufacturer employs traveling salesmen who cover a defined territory and call personally on the retailers.

Practically all men's ready-made clothing is made to fill orders, and little, particularly in the higher-priced lines, is made for stock.

The manufacturer has new designs perfected well in advance of the opening of the season. Sample garments are made up for each traveling salesman, and in addition "swatches," or samples of various styles of cloth, are carried. The salesman submits these samples to the retailers in his territory and takes orders for future delivery, these orders being sent to the factory and there made up according to specifications. Orders are recorded three to six months before delivery.

There has been a growing tendency in recent years for manufacturers to do "tailoring to the trade." This branch of the industry is making rapid strides, and certain concerns confine themselves entirely to this line of business. Others use it as a "side line," in addition to dealing with retailers in ready-made clothing. The initial expense is very large, as it requires the making up of an entire line of samples bound in book form, and in addition, very frequently, made-up models are furnished. It is said, however, that the returns justify the expense, as ventures in this line have proved very profitable. "Tailoring to the trade" is handled for the manufacturer by merchant tailors, or, in the smaller towns and villages, by retail stores. The customer selects the style of cloth he desires from the books of samples, his measure is taken, and the order sent to the factory. The garment is made up and sent for a try-on, and if necessary, is returned to the factory for proper alterations.

Mail-order houses sell entirely through catalogues or by advertising. Both ready-made clothing and made-to-order garments are sold in this way. Some mail-order houses have their own factories, while others buy from the regular manufacturers. It is also said that mail-order houses buy up the left-over goods and odds and ends that the manufacturer is unable to sell to the retail trade. The greater part of the clothing sold by mail-order houses is disposed of in small towns or in rural districts.

Mail-order houses that make clothing to individual order secure their trade principally through advertising. Cloth samples are sent to the customer, from which he makes his selection; he has his measure taken and sends the order to the mail-order house, where

the garment is made up. This branch of the mail-order business is similar to "tailoring to the trade."

There is very little field for the jobber now in handling men's factory-made clothing. Changed conditions in the industry have caused almost the entire elimination of the jobber as a medium of distribution. The manufacturers have preferred to deal directly with their customers, and desire to establish a custom which is their own and upon which they can rely. The little business that is now done with jobbers is in the cheapest lines only, and in job lots and left-over stock.

Table 51 shows the distribution of net sales in the 64 establishments from which information was secured:

TABLE 51.—DISTRIBUTION OF NET SALES.

Number of establishments.	Sold to retailers.	Sold to jobbers.	Sold by mail order.	Sold tailoring to the trade.	Exported.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
52	100.00	.....	.....	.....	.....
2	99.00	.....	.....	.....	1.00
1	99.00	1.00	.....	.....	.....
1	95.00	5.00	.....	.....	.....
3	90.00	10.00	.....	.....	.....
1	90.00	.....	.....	.....	10.00
1	85.00	.....	.....	15.00	.....
2	75.00	25.00	.....	.....	.....
1	.....	80.00	20.00	.....	.....
64	98.21	1.29	.21	.08	.21

In addition to the three establishments that reported the percentages of their net sales exported, seven establishments reported very small exports. The countries to which the exports were made are Canada, the Bahamas, Cuba, Mexico, Panama, Colombia, Peru, and Australia.

Traveling salesmen employed by manufacturers of men's ready-made clothing sell on commission, on salary, expenses, and commission, or on straight salary and expenses. However, the custom almost universal in the industry is for salesmen to be paid a commission on the amount of business they secure. The compensation for traveling salesmen on a commission basis averages about 7 per cent on gross sales. The manufacturer provides a drawing account based on commission, and this drawing account and traveling expenses are deducted from commissions on sales. In most cases the manufacturer prefers to pay a commission, rather than a straight salary and expenses, as the former method keeps the salesman working his best all through the season, and his earnings depend only upon his own industry and ability.

It is generally stated throughout the industry that the cost to sell has been increasing each year, for a number of years. Hotel rates have gradually increased, and all general traveling expenses have advanced. The selling season has become so much shorter than formerly that, it is claimed, it now takes two salesmen to cover the territory formerly worked by one. Formerly orders were large but now they are smaller and more frequent, and this necessitates more trips over the territory and consequently more expense.

Manufacturers have two methods of selling to retailers; they sell to all from whom orders can be secured or confine their business to one or two retailers in each city or town.

There is much difference of opinion in the industry as to which is the more advantageous method. To be successful in selling by the "sole-agent" plan the manufacturer must advertise extensively and establish a national reputation for his merchandise. This plan requires a considerable amount of capital, and none but the larger concerns can afford to embark on such an extensive advertising campaign. The manufacturer selling to sole agents selects the stores in each community handling his merchandise and without doubt has more reliable customers than the manufacturer selling to all retailers. Further, under normal conditions, he can better estimate the volume of his business in advance of the season and has to contend with fewer cancellations and returns and allowances.

The retailer who acts as the sole distributor in a community for a brand of nationally advertised men's clothing enjoys many advantages over his competitors. The fact that he is agent for a well-known make of clothing gives his store a certain prestige. The extensive advertising done by the manufacturer will bring trade not only in men's clothing, but in other lines as well. The retailer acting as sole agent has little trouble on account of late delivery, and he avoids cut-rate sales. Certain retailers, however, object to the sole-agent method, preferring to sell under their own brand and stand behind the reputation of their merchandise, rather than sell under the trade-mark of the manufacturer and do business on his reputation.

There is an opinion in the retail trade that the confining of sales by the larger manufacturers to one or two retailers in each locality is restricting the number of retailers of men's factory-made clothing. It is without doubt a fact that anyone starting in the retail-clothing business experiences great difficulty in securing the agency for any of the large nationally advertised manufacturers. Establishments of this description have their sole agents in all the principal places in the country, and the new retailer is apt to find the brands he desires to handle already controlled by other retailers.

There are, however, numerous manufacturers of men's factory-made clothing who do little if any advertising and whose product is entirely unknown to the general public. Many of these factories turn out high-grade merchandise, garments that will put their customers in direct competition with retailers handling nationally advertised brands. Many retailers prefer to buy from houses of this kind, for they can sell under their own brands and build up a reputation for themselves rather than for the manufacturer. Some manufacturers of non-advertised lines of men's clothing state that when the difference in cost of advertising is taken into consideration they prefer to establish a reputation for quality with the retail trade rather than with the general public.

The largest sales for the winter season are made in April and May, with the heaviest deliveries in August and September. The largest sales for the summer season are in October and November, with deliveries heaviest in February and March. However, some merchants in the West demand earlier deliveries, and the heaviest ship-

ments to this section are two to four weeks earlier than in the East. On account of overcoats, the fall season exceeds the spring business. For years the market has been opened earlier every season, this early opening being an evil of the business that will be discussed later in this report (p. 249).

The tendency in the trade seems to be toward smaller and more frequent orders, one reason for which is the rapid change in styles in recent years. When styles remained more uniform from year to year, the retailer could carry left-over goods from one season to the next and sell them without a loss. Style changes from season to season have put an end to this, and consequently the retailer places smaller orders, fearing that a dull season will leave him with a stock of left-over goods.

Memorandum orders, or goods shipped on consignment, have also caused smaller orders. The retailer knows that by ordering in small quantities he can replenish his stock late in the season at a much lower cost and at a smaller risk of loss, as he can return all unsold goods received on a memorandum order or consignment shipment. The general opinion among manufacturers interviewed was that retailers would continue to put in small orders and order more frequently and that the days of the old-fashioned bulky orders are at an end.

One of the leading men's clothing factories has recently announced a plan to install a department, the object of which will be to make deliveries of merchandise about three days after the order is received. It is natural to suppose that the retailer, knowing that he can secure such prompt delivery and can replenish his stock at short notice, will place smaller initial orders.

Competition in the men's ready-made clothing industry is free and unobstructed and is as keen as it well could be. There are no combinations or large concerns that can be said to dominate the trade or to fix prices. Traveling salesmen visit all sections, and the retailer has the opportunity of seeing a great many lines; hence he is well informed regarding prices and can make comparisons. Retailers have been educated so thoroughly in the business, through salesmen and by other means, that their knowledge is complete. Retailers having such familiarity with prices and opportunity for choice, a manufacturer must quote very close prices or he will not be able to do business.

While there is to a certain extent a uniform scale of discounts and time and dating allowances throughout the industry, the scale is not used by all manufacturers. A great deal depends upon the class of trade served and on the character, reputation, and business methods of the manufacturing establishment.

Some concerns have been successful in establishing such a high reputation for quality that their output can be sold at 10 days net, and in a number of instances these are the only terms quoted. Such manufacturers are not numerous, but they have an immense advantage over others. Very often these strict terms are carried out and the manufacturer is successful in selling on these terms because he quotes very low prices on his goods. Usually, however, the terms to retailers in the clothing trade are 7 per cent, 10 days; 6 per cent, 30 days; and 5 per cent, 60 days, with 6 per cent per annum for anticipation. These terms are supposed to be standard, but the class of

merchandise handled, reputation of the house, importance of the account, and other conditions enter into the terms of discount, dating, etc. Special terms are frequently made to important customers, and salesmen are often permitted to make concessions in discounts and datings in order to obtain new customers, or to make important sales.

The following is quoted from the paper on "Datings and discounts," by Ira D. Kingsbury, read before the convention of the National Association of Clothiers at Atlantic City, N. J., June 1 and 2, 1914:

> Some one has said that cash discounts, as we know them to-day, were established a great many years ago, before the methods of transportation were as adequate as they now are, and that they resulted from the needs of the far-away merchant for quick payment for his goods, which in the old days were many months in transit. Otherwise, long time had to be given and a period of many months elapsed before the trader received his money. Profits in those days were enormous and cash discount proportionately large.
>
> If this is a true statement of the origin of cash discounts, it would seem as though we in the clothing industry had made little or no progress in our terms of sale. I am not in position to give the reasons why the present long terms that are prevalent in the industry were established, but they probably arose from the necessity of assisting the pioneer merchant so that he might carry a more complete stock than he could have done otherwise and also so that he could turn the greater portion of that stock into money before the bill became due. The result has been to place the manufacturer of clothing almost in the position of a banker. The manufacturer, therefore, practically supplies the capital for a large percentage of his customers, and is thus rendering a service which should not be a part of merchandising, but which should be rendered in the channels regularly organized for furnishing financial aid to the merchant.
>
> One of the evils of this practice has been and is to encourage the embarking in business by men with inadequate capital, who expect the manufacturer to carry their account and who depend upon turning the merchandise into cash before the manufacturer's account becomes due. In times when trade is brisk, this may often work out satisfactorily; when trade is restricted and goods do not move seasonably, the merchant in this position finds himself with his bills maturing and without funds to meet them. The manufacturer, who has depended upon his payments coming in at a stated time, in turn finds himself compelled to extend additional time and is often forced to rely upon his banker to finance himself. This leads to an abnormal number of failures, and I believe an analysis of the failures in our industry would show that a very large percentage of them is caused by lack of capital on the part of the merchant. We often find a man with $3,000 to $5,000 cash starting in business with the expectation of carrying a $12,000 to $15,000 stock of merchandise and who invests 50 to 60 per cent of his available capital in fixing up his store. The final end of this man is easy to see. But the mad race to sell goods causes us constantly to take a chance on this man; by doing this we help swell the financial death list in our industry.
>
> This condition tends to create unfair competition by throwing on the market bankrupt stocks, which are sold at a price that creates competition which is impossible to meet.
>
> It seems to me that our present terms of sale, where accounts mature but twice a year, in the months of June and December, tend to heighten this condition. This also creates a condition which is by many retailers forced upon the manufacturer who, through fear of competition, countenances the practice of the taking by a retailer of an excessive cash discount—a discount not contemplated at the time the goods were sold—which gives the recipient of this excessive discount a decided advantage over his competitor, who stands loyally by his agreement and considers the terms of sale an agreement to be lived up to without equivocation or question.
>
> All of us have had experience with the man who places a large order, and when the account finally becomes due makes a demand for terms which were not contemplated at the time the order was placed, and who, by obtaining a concession from one house, uses it as a lever to obtain similar concessions from other houses, creating a condition of competition which is not ethical and which requires considerable force of character to combat successfully.
>
> Our present terms of sale, which are practically uniform throughout the trade, compel us to use an abnormal amount of capital in proportion to the returns, and compel us to carry open accounts on our books to an excessive amount; and in view of the fact that the manufacturers and dealers in raw materials are constantly reducing

both their datings and cash discounts, we are forced to carry a financial load which might be obviated were it possible for us to market our product on shorter terms, more clearly in keeping with those houses from which we buy our raw materials. As it stands to-day, labor, cloth, and trimmings must be paid for in cash, and we must have sufficient capital to finance an entire season's product before bills come due. We find that both our labor and material expenditures extend over on the succeeding season, and I believe you will all agree with me that, with the increase in cost of production in our lines, the percentage of returns on our sales is not adequate for the amount of capital that it is necessary to employ even in a moderate-sized business. Were it not that a good percentage of our customers are so situated and so finance their business that they are in position to take, and do take, the very best cash discounts available, we would find ourselves compelled to strain our own credit in order to meet the demands of our business.

It has occurred to me that our terms invite controversy. The retailer who does not discount his bill promptly in June and December considers that he is imposed upon when he is compelled to forfeit the full 7 per cent cash discount, and if he does not pay that bill until 60, 90, or 120 days afterwards, the large cash discount we allow takes it out of the plane of an interest charge.

Those of us who sell on dating consider that the case discount entirely disappears within four months from dating, and all sorts of pleas are made by the customer to save as much of his discount as possible. Those customers who are addicted to the practice of giving notes expect that in giving a note on which they pay interest at the rate of 6 per cent per annum they have paid all they ought to be asked for the use of that money and still insist on having a full cash discount, thus creating a new contract, which under ordinary rules of trade should not carry the terms of the original agreement. We have all of us had experience with the fellow who puts a new front in his store or puts in new fixtures or erects a building and wants us to help him finance it by giving him an extra 2 or 3 per cent in cash discount and then wait 30 or 60 days beyond the agreed time, and who, notwithstanding the delay in paying, insists on the concession. We know how difficult it is to meet conditions of this kind, and it is only another instance of our terms of sale being the reason for bringing trouble around us. I have in mind one man who asked for a cash donation of $500 to help fit up his store, and it was an account that was not worth more than $7,000 to $8,000 per annum in total purchases.

I believe I am warranted in saying that our line is practically the only line of trade that has not materially shortened the dating and reduced the amount of cash discount. The question is, Why do manufacturers of clothing sell their product on practically the same basis that they sold it 40 years ago? In every other department of our business we have advanced and have kept abreast of the developments of the times. I am sensible of the fact that there are some houses having the nerve and foresight to reduce their terms of sale, and I want to congratulate them on their position in this matter, for I believe that in times of failure those merchants who adhere to what I have mentioned as the established terms in our trade are usually the large creditors and have had the knowledge thrust upon them that the short-term houses, both in our line and in kindred lines, have been receiving money for months past that was in a very large measure for merchandise such as we furnished, while our accounts stand in toto because our terms of sale give merchants the right to withhold payment.

It may sound revolutionary and the clothing industry may be so tied down by traditions that it is impossible to make a change, but the idea has appealed to me strongly that sooner or later, if we are to receive the full measure of success, some radical change must be made in our terms of sales. We should place ourselves on a par with other lines, some as important and some not as important in volume of output as ours, in endeavoring to correct those evils which appeal to us all, and which seem to be growing and which make it each day more difficult for us to operate under an established policy with the idea of a square deal for every man, to give no advantage to anyone, and to preserve our own integrity.

How to dispose of goods left on the hands of the manufacturer at the end of the season is a problem in the industry. A manufacturer may use bad judgment and make up patterns or styles for stock that do not take. In this case he has a large stock on hand at the end of the season, which it is necessary to get rid of in order to make his loss as small as possible.

Cancellations and returns are also the cause of manufacturers finding themselves with a stock of left-over goods on hand. If the season is a good one and the demand active, goods will move more freely and the amount of "left overs" is small. On the other hand, a bad season, caused by a mild winter or depressed business conditions, will cause a large amount of left-over goods.

Most manufacturers attempt to work off returns, or any other goods that would be "left overs" at the end of the season, through the regular season and as early in the season as possible. Much is disposed of by filling regular orders from this stock, and if the manufacturer is lucky enough to work off returns in this way little loss is occasioned. Styles which in the opinion of the manufacturer will be "repeaters"—that is, will be popular the following season—are carried over, as are also the staple lines. At the end of each season, however, there is usually an accumulation of goods which it is not advisable to carry over to the next season. Goods that can not be disposed of in the manner indicated are sold in various ways, frequently at a loss.

Shipping goods on consignment is one method of disposing of "left overs." The customer is requested to try to sell as much of the shipment as possible and to return such goods as can not be disposed of to the factory. Usually the manufacturer fixes a minimum price below which no goods may be sold, but sometimes the retailer is instructed to sell at any price that can be obtained. Certain stores in almost every city make a practice at the end of the season of buying up at a low price, or taking on consignment, large quantities of left-over stock and having sales. Jobbers and mail-order houses buy considerable amounts of left-over goods, and some houses make a practice of disposing of "left overs" through these channels. Large department stores, it was said, are always in the market for left-over stock, but demand greatly reduced prices.

In nearly all instances left-over goods are sold at a sacrifice, and generally the manufacturer is glad if he can get cost out of them. It was stated by a number of manufacturers that they sold this class of goods at prices varying from 33⅓ per cent to 40 or 50 per cent below established prices. The manufacturer is always anxious to dispose of his "left-overs" as soon as possible, for depreciation in value is very rapid, and the longer a stock of this description is held the greater is the loss.

One manufacturer had the following to say on the subject of left-over goods:

> All manufacturers are naturally anxious to get the same prices for goods left over as they have been getting throughout the season, but there again the unscrupulous methods of competition enter. The unscrupulous buyer takes advantage of such a situation and drives the hardest sort of bargaining. It has become a very ordinary thing for the buyers during these periods to ask anywhere from 25 to 50 per cent off the price, simply because the season is somewhat late.
>
> The overdriving of capital employed in the manufacture of clothing has a great deal to do with and is responsible in a measure for a great many abuses in the trade. For illustration: A man with an authorized capital of $50,000 will try to do a business of at least $500,000, and in many instances sells enough to make up that amount; and that sort of manufacturer naturally, if he finds himself with any kind of merchandise on hand, must turn it over quickly, realizing whatever he can on it, and unfortunately a great many manufacturers are situated that way. Some retailers will buy 50 per cent of their needs in the regular way and deliberately state at the time the purchase is being made that they will expect to buy the other 50 per cent at reduced prices of 25 to 40 per cent, and unless the houses they do business with will accommodate them with this reduced-price merchandise, they withhold some of their purchases.

Weather conditions have a great deal to do with the trade in general. An early spring, when business conditions are normal, naturally will produce a heavy demand for spring goods. An early fall has the same effect on fall trade. A cold winter will decrease a stock of overcoats everywhere and a mild winter will naturally produce the reverse result.

TRADE ABUSES.

A manufacturer may spend a great deal of time and money in efficiency and cost systems, employ the best factory supervision, and still lose money, owing to an inefficient sales organization. The selling and distributing cost is the heaviest overhead expense the manufacturer of men's clothing has to meet, and without expert supervision and scientific management heavy losses often occur in this department.

The following is quoted from the address delivered by Mr. David Kirschbaum on "How to make the sales department more efficient" before the annual convention of the National Association of Clothiers at Atlantic City, N. J., June 1 and 2, 1914:

The manufacturing clothing industry, if I am correctly informed, ranks sixth or seventh in importance in America, yet it is the last of all big businesses to recognize the necessity for scientific sales management. As best proof of the above, I think I am safe in saying that up to two or three years ago, sales managers in the true sense were practically unknown in the industry, and if you were to try to-day to obtain the services of a thorough sales expert in our line, you would find that only three or four, or at the most five, concerns have such executives, and that at best, they have only been engaged in the work the past few years. The radical changes that have been and are still taking place in the industry have made it necessary for us to obtain the services of the most capable executives to direct our credit, designing, manufacturing and tailoring departments, yet in that most important department of sales, what is the situation?

Is it not true that it is generally under the supervision of a member of the firm, whose greatest claim to capability lies in the fact that he has had some road experience? He may have been an excellent salesman, but what about being a good executive? Is he likely to be a good general who inspires confidence and enthusiasm, a good statistician, an analyst, a clever judge of men, etc.?

Vital changes have taken place in manufacturing men's clothing during the last decade, and the manufacturer has had to meet these changed conditions in order to keep pace with his competitors. It is surprising to find that manufacturers who are abreast of the times as far as the manufacturing of clothing is concerned, cling to precedents set years ago in the marketing of their product.

It is safe to say that more money is wasted in the sales department than in any other department of the clothing industry. However, it was stated by numbers of manufacturers interviewed on the subject, that it would not be possible to reduce selling expenses without a complete revolution of selling methods. On account of fierce competition and the rapid growth of the industry in recent years, certain evils have been allowed to creep into the business which are almost impossible to eliminate, and the manufacturer who stands out alone against these evil practices will find himself in a very difficult position.

Many remedies have been suggested, and the National Association of Clothiers has taken steps that have accomplished good results. However, until the manufacturers get closer together and there is more cooperation between manufacturers and retailers, it is hard to see that much economy can be effected in selling costs, or that the numerous evils will be eliminated from the industry.

The principal evils in the industry, with which the manufacturers seem unable to cope, are the following: Cancellations, returns and allowances, revisions, indiscriminate extending of credit, extra discounts and dating, buying on one basis and settling on another, concessions to secure new accounts, consignment shipments, memorandum orders, long future delivery, etc.

The most insidious of these evils are cancellations and returns and allowances. One of the principal causes that leads to cancellation is long future delivery. With three to six months elapsing from the time the order is taken to the time when delivery is made, many things may come up that will cause the buyer to change his mind and revise or cancel the order. The buyer may decide he has made too heavy a purchase, or he may see some goods he likes better, or some financial difficulty may intervene of which he had no knowledge when he gave the order, or any one of a number of contingencies may arise which will lead to cancellation.

The buyer, knowing that, as a rule, the manufacturer will stand for cancellation, is not slow to take advantage of the fact, and any pretext is considered sufficient excuse to cancel an order accepted in good faith. This has led to reckless ordering, and it can be said that the manufacturer is not always blameless. Often salesmen in their eagerness to take orders and earn commissions will induce retailers to buy more than they can possibly use, hoping that if any cancellations are made, they will be on orders from other houses.

There are a few manufacturers who claim that they will not accept cancellations, but the number is very small. The extent of competition in the industry leads manufacturers to accept cancellations and returns and allowances. They know that the customer will turn to the numerous concerns in the industry that will stand for such practices, and, rather than lose the account, they will put up with demands that are often entirely unreasonable.

Among some manufacturers it is the custom to delay making up goods until the retailer has an opportunity to revise his order. Sometimes they delay long enough to allow time for two revisions, and then start in to manufacture with more certainty that the order will not be canceled. This practice of delay for protection, however, is a great inconvenience to the manufacturer, as it causes "rush work" and prevents an even distribution of production over the manufacturing season. In speaking of these trade abuses a manufacturer said:

The extent of the trade abuses of cancellations and returns in this industry can hardly be exaggerated. Manufacturers seem unable to cope with the situation, and retailers apparently can practice these abuses at will. The manufacturer claims that retailers make claims of defects or any excuse for returning the goods. Very often at the end of the season when they find they have stock left over they return it to the manufacturer. The fact that competition is so very keen causes this, as manufacturers know that if these demands are not met, of whatever nature they may be, a customer is lost, and some other manufacturer will obtain him. As a result, almost any demand a retailer makes is agreed to.

The following is quoted from an address by Mr. David Kirschbaum on "How to make the sales department more efficient," delivered before the annual convention of the National Association of Clothiers, June 1 and 2, 1914:

A clever sales executive will probably tell you that one of the largest items of loss directly due to sales inefficiency is that which accrues annually from the deliberate encouragement a number of salesmen give the trade at the time of booking their orders, when they tell the retailer he can select whatever he likes with perfect safety, because

the salesman knows the house will necessarily accept the cancellation (no matter when it comes), for fear of losing the account. It was said at one of our recent conventions that the average (annual) cancellation (this includes revisions, of course) for all manufacturers was about 20 per cent. Just think what that means: One-fifth of all the time, effort, and money expended to secure your entire business is regularly wasted each year.

We are agreed that cancellations can not be entirely eliminated. However, the evil being largely in the making of our representatives, careful education and discipline and possibly some method of penalizing the incorrigible salesmen, will bring marked changes for the better. The tremendous variation in the percentage of cancellations in adjoining States and in identical territories proves that this subject is a fruitful field for a capable executive.

It might be said here that no salesman is doing his duty by the house or by the retailer when he deliberately sells the retailer more goods than he knows that retailer can use to advantage, and where the salesman is guilty of such practices, it can only bring one of two unprofitable results—the return of the merchandise and the loss incident thereto, or the overstocking of the retailer, whose opportunity to dispose of same is also restricted to a loss.

The selling of models or fabrics that are absolutely unsuited to the retailer's trade deserves far more consideration than this subject has had at our hands in the past. A thoroughly capable salesman will study his customers' requirements and will help them make the most intelligent selection, thereby assisting retailers to that extent in marketing a greater percentage of their purchases at a profit. The intelligent salesman will protect both the retailer and manufacturer by helping the former exercise the necessary care in his purchases. He should be informed not only as to correct styles for that particular territory, but if possible also as to the latest retailing methods, so as to help such retailers as may be in need of intelligent and honest advice.

Further than that, I believe the successful wholesale clothing salesman of the future will require technical knowledge necessary to discriminate between good and poor clothing, so as to be in a position to pass that knowledge on to the retailer, who to-day is woefully lacking in this particular, and who in turn needs this knowledge to discriminate between what is good, mediocre, or very poor.

Your sales executive would probably give attention also to the old-fashioned method still practiced by many salesmen, that of spending a brief half day, or at most a day, in studying the models, the fabrics, and all details covering same, instead of devoting two or three whole days to a full understanding of all important features, and so be in a position to do his work thoroughly, and thereby get maximum results out of his territorial possibilities.

There is no question that thousands upon thousands of garments are now unnecessarily cut special that would otherwise be cut, trimmed, and tailored with regular stock lots if the salesmen were properly informed on all the details of their lines and of course exercised the right judgment. * * *

There are many phases, such as the unusually liberal compensation paid wholesale clothing salesmen, the lavish methods of many, the unreasonableness of manufacturers assuming the entire risk of maximum drawing accounts to salesmen and the loss incident thereto when there are crop failures, industrial depression, or financial panics, the discrediting of your line in a community by reason of its having been placed with an undesirable retailer or one to whose business your product is entirely unsuited, and many other subjects, all of which should receive our most careful consideration, and at the hands of an experienced and capable man obtain for us a much higher efficiency on the part of our salesmen and very substantial economies in our sales department.

Revision of orders is often the cause of loss to manufacturers. If the order is revised before the goods have been cut, or are in work, there is of course no loss, but late revisions after the goods are in process of manufacture cause "left overs."

Indiscriminate extending of credit, next to cancellations and returns and allowances, is perhaps the greatest evil in the industry. This condition is entirely due to the tremendous competition in the business and the desire of manufacturers to secure new accounts.

The reckless extending of credit not only leads to losses due to failures, bad debts, and slow payment but is one of the causes of cancellations and returns and allowances. A manufacturer had the following to say regarding credits:

One of the greatest curses of the business results from the terms made by manufacturers to retailers. These have grown more liberal right along, until almost anyone can get into the retail business and get credit from manufacturers.

On account of this a vast number of men are in business and receiving credit who have no ability to carry out what they attempt. These conditions have attracted a great many who are not honest. Altogether, manufacturers would profit by nothing so much as to put their selling on a cost basis and do business with business men only, and this would happen if a cost basis could be adopted.

Demands for extra discounts and datings on the part of retailers are generally complained of by manufacturers. These concessions are often granted to hold an account, and it is said this evil is more prevalent in the industry than ever before. Often, it is said, retailers buy on one basis and wish to settle on another. The order is taken in good faith on the part of the manufacturer and after the goods are delivered, the customer makes certain demands for extra concessions, which the manufacturer has to grant in order to prevent a return.

Concessions to secure new accounts are common in the industry. To secure a new account, salesmen often give the customer advantages in the way of discounts, datings, etc., or tell him that the house will stand for returns or cancellations. This practice works against the manufacturer every time. A new account secured in this way always proves uncertain and unsatisfactory. The customer, having been granted these concessions in the beginning, will always expect the same terms and will continually make unreasonable demands.

Consignment shipments and memorandum orders, while good methods of disposing of left-over goods, are on the other hand, a distinct disadvantage to the manufacturer. Retailers, knowing that they will be able to replenish their stock near the end of the season at reduced prices through these shipments, place smaller initial orders at the regular terms. It is without doubt a fact that consignment shipments and memorandum orders are an evil in every industry.

Long future delivery, as previously stated, is the principal cause of cancellations, returns, and allowances, and other evils in the business. The manufacture of men's clothing is necessarily a slow process, considering the time taken to get cloth from the woolen mills and the time consumed in making up the goods. However, manufacturers are in a way to blame for long future delivery. In consequence of the desire of some manufacturers to get their lines before the retailers ahead of their competitors, salesmen start out on the road earlier each year. This of course has the effect of causing a longer time to elapse between the time the order is taken and the date of delivery.

For instance, salesmen will start out in October to take orders for the following spring and summer season, when the retailers have not yet begun to move their winter goods. It can readily be seen that the retailer is not in a position at that time to know exactly what he will need for the following season. As yet he has sold only a small part of his winter stock and he is unable to know how this stock will move, which is necessarily a factor in placing spring and summer business. It should further be considered that it is not always the first salesman in the field that secures the orders. The retailer may wish to have the chance to look over several lines before he determines where he will buy. In the event that the early salesman secures an order, the next salesman who comes along may have a line that in the estimation of the retailer is more attractive, or he may offer better terms, either of which may lead to a cancellation of the first order.

Without doubt the manufacturers would do a better and more satisfactory business if they would give the retailer a chance to get rid of at least some of one season's stock before they tried to sell him the next. There would be fewer cancellations, returns, allowances, and revisions, and the retailer would be in a better position to give an intelligent order than when he is approached so early in the season.

The following table compiled from data obtained from the 22 establishments that furnished complete information shows the proportion of returns and cancellations to net sales, the percentage based on net sales of estimated loss from returns and allowances and cancellations, the percentage of manufacturing profit and final profit (based on net sales) actually received, and the manufacturing profit and final profit plus the total estimated loss from returns and allowances and cancellations. As it was not possible to arrive at the exact losses due to returns and allowances and cancellations, the figures submitted in the table represent the manufacturers' estimates of their losses due to these causes:

TABLE 52.—EFFECT OF RETURNS AND ALLOWANCES AND CANCELLATIONS ON PROFITS.

Establishment.	Returns and allowances.	Cancellations.	Total, returns and allowances and cancellations.	Estimated loss on returns and allowances.	Estimated loss on cancellations.	Total estimated loss.	Manufacturing profit.	Final profit.	Manufacturing profit plus total estimated loss.	Final profit plus total estimated loss.
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*	*Per cent.*
No. 3	4.02	21.20	25.22	0.81	1.06	1.87	6.79	6.65	8.66	8.52
No. 4	.21	1.05	1.26	.02	.11	.13	6.50	5.96	6.63	6.08
No. 11	7.35	14.27	21.82	2.52	.14	2.66	5.87	5.74	8.53	8.40
No. 13	8.53	10.84	19.37	.87	.43	1.30	2.01	.49	3.31	1.79
No. 14	5.33	12.78	18.11	1.60	3.20	4.80	5.20	4.32	10.00	9.12
No. 15	3.77	5.99	9.76	1.26	1.98	3.25	[a] .40	[a] 1.15	2.85	2.10
No. 17	9.26	6.77	16.03	.93	.14	1.07	5.03	5.01	6.10	6.08
No. 18	7.01	14.06	21.07	.98	1.41	2.39	[a] 1.10	[a] 1.43	1.29	.96
No. 19	2.88	1.60	4.48	.53	.20	.73	6.09	6.00	6.82	6.73
No. 27	14.24	10.40	24.64	1.42	.31	1.73	6.51	4.50	8.24	6.23
No. 30	6.65	4.82	11.47	1.25	.36	1.61	3.11	1.86	4.72	3.47
No. 34	3.92	12.82	16.74	1.96	1.92	3.88	3.74	2.57	7.62	6.46
No. 39	13.33	14.37	27.70	2.67	2.87	5.54	3.41	5.62	8.95	11.16
No. 40	6.50	28.02	34.52	1.60	.76	2.36	6.23	6.70	8.59	9.06
No. 45	9.77	8.90	18.67	.89	.22	1.11	7.04	6.75	8.15	7.86
No. 47	20.81	16.92	37.73	2.63	1.13	3.76	4.71	3.92	8.47	7.68
No. 49	7.35	26.74	34.09	1.32	.66	1.98	3.00	1.52	4.98	3.50
No. 52	10.06	10.06	20.12	1.01	.50	1.51	8.44	7.48	9.95	8.99
No. 53	8.53	15.98	24.51	2.13	4.00	6.13	2.08	1.48	8.21	7.61
No. 54	6.92	15.97	22.89	.69	1.60	2.29	.04	[a] 1.00	2.33	1.29
No. 59	8.66	1.62	10.28	.87	.03	.90	8.07	7.04	8.97	7.94
No. 61	3.71	25.26	28.97	.74	3.16	3.90	1.30	.89	5.20	4.78
Average	7.59	15.44	23.03	1.57	1.29	2.86	4.58	4.42	7.44	7.28

[a] Loss.

While it is hardly possible to eliminate these evils from the industry, some means should be found by which the manufacturer can protect himself to some extent from practices that are each day becoming a greater menace.

While the percentage of cancellations is over twice as large as that of returns and allowances, the loss on returns and allowances is greater than on cancellations. This condition is due to the fact that a large percentage of cancellations are made before the goods have been cut, entailing a small loss, while returned garments thrown on

the hands of the manufacturer are hard to dispose of and are frequently sold at considerable sacrifice.

Establishments Nos. 15, 18, and 54, which show final losses, would each have shown a profit if they had had no returns and allowances nor cancellations.

The consensus of opinion among manufacturers is that before the existing evils in the industry can be eliminated there will have to be closer cooperation between the manufacturers and retailers. It has been suggested that a joint committee composed of members of the National Association of Clothiers and the National Association of Retail Clothiers could do much toward bringing about such cooperation. Disputes of all kinds between manufacturers and retailers could be referred to this committee for arbitration and without doubt much good could be accomplished. An agreement covering the following headings should be drawn up and adhered to between manufacturers and retailers, and it should be the duty of the joint committee to adjust claims made under the agreement:

There should be no cancellations except under conditions that would make it absolutely necessary.

No cancellations, revisions, or alterations should be accepted after the goods have been cut.

No goods should be returned without proper cause, such as the merchandise not coming up to specifications, inferiority of workmanship, late delivery, etc.

Demands for allowances should be granted only with good reason and after thorough investigation.

Manufacturers should be required to deliver goods at the time specified in the order, otherwise the retailers should have the option of returning the merchandise.

Where the manufacturer has not lived up to the order and has substituted styles or materials not called for, the retailer should have redress.

This committee should also go into the matter of cut-price sales, where fraudulent advertising is resorted to, misrepresenting merchandise and prices.

Closer cooperation among manufacturers will also do much toward eliminating trade abuses in the industry. Recommendations by the National Association of Clothiers in regard to manufacturers keeping uniform cancellation records and interchanging cancellation and credit information are excellent, and, if adopted throughout the industry, would eventually lead to a great reduction of losses.

CHAPTER VIII.

MACHINERY AND PROCESSES.

MACHINERY FOR MAKING CLOTHING.[a]

The history of sewing machines starts with the patent granted to Thomas Saint, in England, July 17, 1790,[b] and the first sewing machine known to be put in operation was one patented by Barthélemy Thimonnier in France in 1830. These machines, until their destruction by mobs, were successfully used in making some of the clothing for the French army. Thimonnier patented his machine in the United States in 1850. Several patents on sewing machines were taken out in England and the United States up to 1846, on September 10 of which year Elias Howe, jr., of Boston, received a United States patent on the sewing machine as we know it. The stitch employed by the machines prior to Howe's was either a chain stitch or a back stitch, in imitation of hand sewing. Before Howe's machine was patented Walter Hunt of New York attempted to make a lock stitch, as the chain-stitch work was apt to run or come out. He used a needle with an eye near its point, so that on forming a loop below the cloth a little shuttle might pass on through the loop, carrying the second thread with it. Hunt, however, never patented his idea. Howe's machine had a needle with an eye near its point, which had previously been used for handwork in France, and which with a shuttle beneath the cloth formed a lock stitch. An intermittent feed carried the material forward as each stitch was formed.

Returning to the United States after an unsuccessful attempt to introduce his machine in England, Howe found I. M. Singer & Co. and others making sewing machines. Howe instituted legal proceedings against these manufacturers, and his suit was sustained by the courts. In 1860 Howe got a 7-year extension of his patent, but in 1867 his application for another extension was denied. Improvements in the machine were rapid after Howe's patent. Among them were inventions by John Bachelder, Allen B. Wilson, Isaac M. Singer, and others. In 1856 the owners and controllers of the Bachelder, Wilson, and other fundamental patents, Elias Howe, I. M. Singer & Co., the Wheeler & Wilson Manufacturing Co., and the Grover & Baker Sewing Machine Co., pooled their patents.

The improvement in the sewing machine has continued until it has been adapted to almost every commodity that can be sewed. From 1842 to September 10, 1895, the United States issued 7,439 patents on sewing machines and accessories.[c]

The following is a chronological list of the important early sewing-machine patents in the United States, compiled from Frederick G.

[a] For history of the sewing machine see Frederick G. Bourne's American Sewing Machines, in One Hundred Years of American Commerce.
[b] Ibid., p. 525.
[c] Ibid., p. 533.

Bourne's American Sewing Machines, in One Hundred Years of American Commerce:

Dates.	Serial numbers.	Names.	Inventions.
Sept. 10, 1846	4750	Elias Howe, jr.	Eye-pointed needle in combination with shuttle for under thread, continuous thread from spools, lock stitch, automatic feed the length of baster plate.
May 8, 1849	6439	J. Bachelder	Two or more threads, chain stitch, continuous feeding device, horizontal table, and overhanging arm.
Nov. 12, 1850	7776	A. B. Wilson	Lock stitch, vibratory shuttle pointed at both ends, reciprocating feed-bar.
Feb. 11, 1851	7931	W. O. Grover and W. E. Baker.	Chain stitch, two or more threads.
Aug. 12, 1851	8294	I. M. Singer	Lock stitch, feed wheel, thread controller.
Aug. 12, 1851	8296	A. B. Wilson	Lock stitch, rotary hook, for carrying upper thread around bobbin containing under thread.
Mar. 7, 1854	10309	C. Miller	Button hole, two threads.
Apr. 4, 1854	10728	W. H. Akins	Cop for shuttle.
Apr. 11, 1854	10757	S. J. Parker	Lock stitch, transverse reciprocating shuttle.
May 31, 1854	10994	M. W. Stevens and E. G. Kinsley.	Lock stitch, reciprocating shuttle in cylinder bed, with feed wheel.
Nov. 7, 1854	11884	D. C. Ambler	Lock stitch, two needles, over seaming for felling lap seams.

The following statement of the Singer Manufacturing Co., quoted from page 75 of "The Clothing Industry in New York," by Jesse E. Pope, will give some idea of the improvement and perfection of the sewing machine:

"Stitching machines were first operated in the clothing trade by foot power at a speed of 800 or 900 stitches per minute. The construction was clumsy and hard to operate. Gradually machines were built with less motion and friction in the parts and were able to attain greater number of stitches per minute with less labor, but still operated by foot power. * * * Machines on mechanical power were able to be operated on a speed of about 1,200 to 1,500 stitches per minute, and finally to 1,800. Later, machines with a speed of 2,000 stitches per minute came into general use. In 1895 a machine was put on the market permitting a speed of 2,800 stitches per minute, and finally, in 1900, first-class results were obtained on a machine with a speed of 4,000 stitches. During all these changes the desire has been to get as little motion in the machine and confine the mechanism to as few parts as possible.

The introduction of the swinging treadle enabled the operator working by foot to attain a high speed. The introduction of electricity was of utmost importance. It increased the production and made greater speed possible with less strain on the worker. To-day all large shops and most contractors, even the small ones, utilize electric power. The trade-union has been chiefly responsible for the introduction of electricity in contract shops. Improvement has taken place not only in increasing the speed of the machine but also in adapting the machine to all kinds of operations, by the aid of various attachments.

The first power cutting machine was made by Albion and Warth, of Staten Island, in 1872. This machine was operated by steam, and consisted of a reciprocating vertical blade. About 1873 or 1874 appeared the Fenn cutting machine, also worked by steam power, but consisting of a circular rotary knife. In 1892 Bloch, of Cincinnati, brought out a rotary machine, weighing about 35 pounds, which was run by electricity. In 1897 the Eastman Co. introduced the first electrically run vertical-blade machine, which cut a maximum thickness of about 1½ inches of cloth, and in 1900 they introduced their rotary machine.

The present-day machine does the same work as the Bloch machine, but is much simpler in construction and has many improvements. The machine for ordinary use weighs about 15 pounds.

The original form of pressing iron was a large goose, heated on a stove and applied directly to the goods without mechanical aid. This has been improved by the introduction of a blower iron, using ordinary illuminating gas, which heats each iron individually. Most off or final pressing is still done by this form of blower iron. For under pressing, as this work requires much heavy labor, various high-power pressing machines, with the iron attached to a crane or movable arm, have been introduced.

Cloth-testing machine.—The cloth-testing machine is simple in construction and is built on the dead-weight principle, thus doing away with inaccuracies due to changes in temperature, careless handling, etc., which occur in spring-type machines. The machine is built in both automatic and hand styles, and in various sizes. The automatic machine makes the complete test in less than one minute. In the hand machine the test is made with the clamps holding a sample of the cloth, usually one-half or 1 inch in width, the clamps being exactly one-half or 1 inch apart. The cloth must be inserted so that it is flat in the jaws, not angled or twisted. The hand wheel is then revolved, as steadily as possible, at a speed of about 150 revolutions per minute, until the cloth is broken. A dial indicates the number of pounds' pull upon the cloth at the breaking point.

Cloth-weighing machine.—The cloth is weighed by means of a torsion balance scale, one for woolen cloth, which gives the weight in ounces to the yard of cloth, and one for cotton fabrics, which gives the number of yards to the pound.

Automatic cloth-laying-up machine.—The automatic cloth-laying-up machine is used principally for linings and interlinings—goods that are flat folded. It will lay up any fabric if it is in a single ply and not doubled over. It will not, however, lay up cloth that has a nap, as the machine in laying up doubles back, which would result in the nap running in different directions.

The machine is run along tracks attached to the cutting table; these tracks can be widened. The table has a straight line marked near the front edge and on the machine, in the same line with this, are cloth guides to keep the goods in such a position that they will be laid up with an even edge in front. What variations there are in the width of the cloth come in the back. The machine stretches the goods at the proper tension.

The machine is pushed along until one thickness of cloth has been laid; the cloth is then automatically and instantaneously folded and the machine is pushed back, laying up another thickness. No cutting of the goods at the end of the lay is necessary, as in laying up by hand. A register automatically counts the ply as they are laid down. The machine has two leader blades, which lead the cloth onto the pile; they automatically rise as the pile thickens. The manufacturer of this machine estimates that one boy working this machine will lay up twice as much cloth as two boys by hand.

Cloth clamp.—For those who do not use a laying-up machine, there is a simple cloth clamp, which holds the ends of the cloth securely and uniformly while it is being laid up. It does away with the need of weights. The manufacturer of this clamp states that its use saves

15 per cent of the laying-up time, adds 5 to 10 inches to the length of the lay on account of the extra tension, makes cutting easier and more accurate, and lessens the strain on the cutting machine.

Cutting machines.—Cutting machines rest on a flat bedplate, which is adapted to glide easily under the cloth. They are comparatively light, and are made with two styles of blades, the rotary, or circular, and the straight knife, or reciprocating, blade. Both types are run at great speed, on either a direct or an alternating current, and are built to operate on 110 or 220 volts. The power is easily transmitted from the motor to the knife, and both types have detachable lamps. The current is switched on or off by a simple thumb operation that does not necessitate removing the hand from the handle of the machine. The machine also has a sharpening device that sharpens both sides of the cutting surface, thereby preventing a wire edge. The machine is equipped with a guard and guide, one piece of meta[1], which not only keeps the goods from becoming disarranged in cutting, especially in the case of the straight knife which goes up and down, but also protects the hands of the cutter. The rotary-blade machine is usually made with 4 and 5½ inch diameter blades. The 4-inch blade will efficiently cut a maximum of cloth 2 inches high, and the 5½-inch blade machine, a maximum of 3 inches. The straight-knife machine is made with all size blades, from 2½ to 8 inches, and will cut goods the height of the blade. (Fig. 1.)

The straight-knife machine is better than the rotary for cutting corners and curves because it cuts up and down. With the rotary machine the blade cuts the upper before the bottom layers of cloth. The rotary is, however, the faster machine, and is easier to handle and more easily sharpened. (Fig. 2.)

The representative of the manufacturer of these machines claims that, exclusive of laying-up time, the straight-knife machine will do about three times as much work as the long knife worked by hand.

Lining-making and seam-closing machine.—The machine for seaming the linings of coats and putting on the facings has a single needle, a long arm, drop feed, and rotating hook driven by a flat belt. The machine makes the lock stitch and can be operated safely and without vibration at a speed of 3,000 stitches per minute. It is most profitable for handling light work, and is generally used for closing linings, facings, pocket making, seam closing, welt seaming, and general work on all kinds of clothing. (Fig. 3.)

Seam-closing machine.—For the seaming on cloth where the occasional use of a trimmer is desired, a high-speed, long-arm machine making a lock stitch is used. It is equipped with an adjustable trimmer, to trim from one-sixteenth to one-fourth of an inch from the seam on either light or heavy fabrics. This trimmer can be thrown into or out of action at the will of the operator, so as not to impair the value of the machine for plain stitching. A cavity in the throat-plate at the right of the trimmer knife is provided as a clearance for the knife and to prevent lint from dropping upon the shuttle. The machine can be driven up to 1,800 stitches per minute. (Figs. 4 and 5.)

Serging machine.—The machine designed for serging pants and cut edges of cloth makes the double-thread chain-stitch, and is capable of being operated at a speed of 3,300 stitches per minute. Its production is limited only by the skill of the operator. It has an adjustable guide for various weights of cloth, is substantial in construction,

and does not get out of repair easily. The expense for its maintenance is extremely low. (Fig. 6.)

For serging, or overcasting the raw edges of materials before seaming, several machines are in general use. One is a zigzag, lock-stitch machine that is used wherever this style of work is required. The needle-throw from side to side is adjustable up to seven thirty-seconds of an inch. The lock, or intersection of the upper and under threads, is formed at the edge of the goods, the needle having a movement from side to side as the material moves forward. The machine can be run up to 2,500 stitches per minute. (Figs. 7 and 8.)

Canvas front-making machine.—The canvas front-making machine is a one-needle zigzag, lock-stitch machine, and is designed for sewing or making coat pads and canvas fronts, with wide bight and zigzag lock stitch. The bight is adjustable up to five-sixteenths of an inch in width, and straight seaming can be done if desired. The stitch is elastic, allowing for the forming or shaping of the coat fronts in accordance with the pattern and materials. The machine is capable of a speed of 2,000 stitches per minute. (Figs. 9 and 10.)

Blind-stitch machine.—Felling, or blind stitching, is a delicate operation requiring a steady hand and excellent sight. There is a machine on the market that does away with hand felling, by means of a device permitting an operator to make the needle dig into a piece of cloth no matter how slight, to any depth desired, and almost instantly to adjust it for felling. The machine eliminates slow and costly hand felling and gives a good finish. The manufacturers of this machine claim that it will produce neater and more evenly finished work than is possible by hand. Machines are especially built for felling coat bottoms, sleeve linings at the coat cuffs, pants bottoms, and numerous other operations. The cylinder lock-stitch type is recommended by the manufacturer for use in the various felling operations on coats, pants, and overcoats; the flat bed lock-stitch type for padding collars and lapels, and felling bottoms and facings of coats. A single-thread blind-stitch machine is also made to pad collars and lapels and finish pants bottoms. Just half the cloth or thread is caught by the needle and not a single stitch shows through. The work will not unravel. The manufacturer of these machines claims that through their introduction the cost of felling operations has greatly decreased. The following comparative production is stated in their advertisement: Padding collars—by hand 50 per day, by machine 400 per day; padding lapels—by hand 40 coats per day, by machine 250 coats; felling pants bottoms—by hand 100 pairs per day, by machine 600 pairs per day.

Shoulder-pad machine.—While it is customary for many manufacturers and contractors to buy their shoulder pads, it is possible to make them very economically. The shoulder-pad machine makes a basting or tacking stitch. The material is moved by the operator back and forth under the needle for a long or a short stitch, as may be required. The machine has a hollow needle bar, a needle stripper in place of a presser foot, and a high lift. It is equipped with a stop motion and can be set for the required number of stitches. The machine will stop with the needle raised to the highest point, ready for the next pad. The average production of one of these machines is approximately 1,800 pads per day varying with the size of the pads.

Two-row stitching machine.—The two-row stitching machine has two needles and makes the lock stitch. It is made in gauges, or widths between needles, of one-eighth of an inch to 1 inch. The machine makes two rows of lock stitching and can be run up to 1,700 stitches per minute. (Figs. 11 and 12.)

Gathering machine.—The machine for gathering the sleeve makes the single-thread chain stitch, and has an adjustable gathering feed that can be put into or out of action by the hand lever while the machine is in operation, and that makes it possible to take in the fullness of a sleeve whenever desired. It is equipped with a guide to carry tape wherever this additional reinforcement is required.

Sleeve-inserting machine.—The sleeve-inserting machine has a cylinder bed. Where a machine of this type is used it is customary to omit the gathering of the sleeve before inserting, as the alternating pressers with which this machine is equipped make it possible for the operator so to manipulate the garment as to bring it out without fullness or puckering under the arm. The machine can be driven up to a speed of 1,800 stitches per minute. (Figs. 13 and 14.)

Buttonhole machine.—The machine for making buttonholes in coats, vests, etc., makes eyelet-end buttonholes from one-half of an inch to 1½ inches long without changing any of its parts. The buttonhole has a fine, raised purl at its edges, and a reinforcing cord or gimp is laid under the stitches as is done in handwork, which the finished buttonhole closely resembles. The cutting of the hole is done by the hand-cutting lever attached to the machine, either before or after stitching. The machine can be driven up to a speed of 1,000 stitches per minute. (Figs. 15 and 16.)

There is another buttonhole machine on the market, the manufacturer of which claims that it makes a buttonhole as perfect as one made by hand, and that the buttonholes made on this machine are stronger, will wear better, and look better than the handmade buttonhole. The machine runs equally well with any kind of material, from the thinnest mohair to the heaviest woolen. The machine is entirely automatic, the material always held stationary, and the stitching mechanism travels around the buttonhole. The machine can be easily adjusted to any width, bight, or gauge, and the needle is self-setting. The buttonhole is not cut until after it has been worked in the goods. The machine makes a high purl and can be run with any grade of silk or good cotton. The machine is speedy, simple in all its movements, is easily operated, and does not easily get out of order. The machine is made in various types and for buttonholes of various lengths up to 1½ inches.

Blind buttonhole machine.—There are a number of methods for making blind or imitation buttonholes on the cuffs of sleeves. One of the machines for this purpose makes a purl stitch without bars. The inside measurement of the buttonhole can be adjusted from three-eighths to three-fourths of an inch. There are a number of other machines making barred or whip-stitch buttonholes without eyelets. The machines are simple and effective, not liable to get out of order, and being automatic, are easily handled by all operators. The knives furnished with the machine are easily removed, and when it is desired to make real buttonholes (in trouser flies, coat

lapels, etc.) are easily replaced. The machine is capable of a speed of 1,600 stitches per minute.

Tacking and barring machine.—Tacking and barring in their various forms cover so wide a range that it would necessitate several pages to illustrate the different machines and their various kinds of work. Generally speaking, this work can be divided into buttonhole, fly lap, hanger and placket tacking, pocket barring, and the making of imitation buttonholes, tagging, and labeling.

The machine in general use for buttonhole barring makes a bar from one-eighth to one-fourth of an inch long, composed of 7 staying, 11 covering, and 3 tying stitches that hold the ends of the buttonhole firmly together, giving the finished bar the appearance of being an integral part of the buttonhole itself. The machine ties a knot on the underside of the garment and cuts the threads, eliminating all danger of unraveling. The saving in silk effected by the machine is very large, as the trimming of the threads close to the under side of the knot entirely disposes of the long loops of waste threads between buttonholes. The machine is capable of a speed of 1,000 stitches per minute.

Ticket-sewing machine.—The ticket-sewing machine sews a single continuous chain stitch, which pulls out instantly and entirely when the ticket is removed. It automatically forms a triangular stitch in one operation, the needle puncturing each hole only once. This operation prevents each needle puncture from containing too much thread, which often causes bad holes. The ticket will stand hard wear, and will not come off even if run against a pressing iron. By inserting a needle or pin under the finishing stitch, the ticket can be removed instantly, leaving no loose threads which when pressed into the garment would cause unsightly lumps.

Coat-hanger tacking machine.—The tubing to be used for the hanger can be cut to length and by this method an operator can sew 3,000 to 4,000 hangers daily. This machine makes a very firm, strong fastening, using 42 stitches, of which 12 are staying, 27 covering, and 3 tying. It draws the top thread below, fastening and automatically trimming both threads at the completion of each bar and leaving no short ends on the right side of the goods. As the work leaves the machine it is finished without waste of thread.

Tacking trouser loops machine.—The machine for tacking belt loops to trousers fastens them firmly by tacks, which may be three-eighths to seven-eighths of an inch long, and the width of bight lengthwise of the loop one-sixteenth to three-sixteenths of an inch. The number of stitches can be varied at will. The threads are cut off automatically, and the complete operation is performed so quickly that the resulting average output for a proficient operator is 40 or 50 dozen pairs of trousers, each having five or six loops. (Figs. 17 and 18.)

Label-sewing machine.—The machine for sewing woven labels at the top of inside breast pockets on men's coats is a post machine having a high arm and single needle; there is ample room to turn the garment, in order to stitch the four sides of the label. The post of the machine being small, it is easy to slide the pocket over it. This machine can stitch 300 to 400 labels per day. (Fig. 19.)

Button-sewing machine.—The machine for sewing on flat buttons makes a specified number of stitches, always including 3 tying stitches. It stops automatically when the needle is at its highest point, and

cuts the threads on the underside of the fabric. The machine also has a reliable automatic thread-trimming device. This machine makes 18 cross and 3 tying stitches, makes cross stitches in four buttonholes, and can be adjusted for two-hole and bar buttons. The needle throw is from five thirty-seconds to five-sixteenths of an inch. This machine will take buttons from 15 to 48 lignes in diameter. As the work leaves the machine it is finished, with no waste of thread nor short ends on the right side, the threads being drawn through, tied, and automatically cut off on the underside of the garment. A good operator, under normal conditions, can sew 5,000 or 6,000 buttons daily. (Figs. 20 and 21.)

Another button-sewing machine is simple in construction and operates without knives or bobbins. It is a single-thread machine, on which the finest thread may be used. It sews all sizes and styles of two and four hole buttons and on all fabrics, light, heavy, or medium. The stitches on the fabric are spread over a large surface to prevent the thread that holds the button from pulling through the cloth. The machine automatically forms a given number of stitches. After the button is sewed the machine cuts the thread without the use of knives but by a stationary mechanical device.

Pocket-making machines.—The machine for making pockets on coats and trousers where an overcast seam is desired is a three-thread chain-stitch machine that trims and overedges at the same time. It will handle fabrics up to five-sixteenths of an inch in thickness. The machine can be operated at a speed of 3,000 stitches per minute, and the seam produced is superior to lock-stitch work for this operation, as it will give with the stretching of the pocket, and it has a more finished appearance than a single lock-stitch seam. (Figs. 22, 23, and 24.)

Back-pocket machine.—The back-pocket machine is a two-needle machine with a one-fourth-inch gauge. A knife is set midway between the needles, so that the pocket hole is cut and the two lines of stitching are made at the same time. If the pocket holes are cut while the lining and reinforcing welts are being stitched in position, the pockets are stronger and more durable than those made in the ordinary way, and the production is greatly increased. (Fig. 25.)

Seaming-trousers machine (outside seam).—This machine has a combination needle and drop feed with needle hole in the feed dog. It stitches straight and bias pieces together and brings them out even at the end. Not only is it unnecessary for the cutter to allow an extra length in one of the two pieces to compensate for the gathering action of the feed, but the usually troublesome fulling along the length of the seam is entirely obviated. The machine is capable of 2,800 stitches per minute. (Figs. 26 and 27.)

Lap-seam felling machine.—Where, in the cheaper grades of trousers, it is desired to make a lap seam fell on the outside seam, the felling machine has a cylinder bed, feeds up the arm, has two needles, and makes the two-thread chain stitch. It is capable of being run up to 3,400 stitches per minute. The machine makes a perfect fell on the heaviest work without pulling in the feller, and produces a seam that will not wrinkle or pucker at the knee. The machine is made in gauges, or distance between needles, of one-fourth, nine thirty-seconds, or five-sixteenths of an inch. (Fig. 28.)

Pants-flies machine.—The pants-flies machine binds and trims the edge of the fly, making a tight and perfectly flat seam, and at the

same time removing all surplus material; it is adjustable in width of bight from one-sixteenth to one-fourth of an inch. The machine can be driven up to 3,300 stitches per minute. (Figs. 29 and 30.)

Binding machine.—The growing fashion of binding the tops of high-grade trousers has led to the development of a number of new machines especially designed for this work. One of these is a vertical trimming and binding machine, which can be fitted to trim from one-eighth to one-half of an inch from the needle, using any size binder required. It has a hole in the bedplate to allow trimmings to pass through. The knife can be thrown into and out of action at will. The machine is capable of a speed of 3,000 stitches per minute. The curtains and canvas can be put in with a single line of stitching about 1½ inches from the top of the trousers; the machine will then put the binding on and trim the raw edges of the curtain material and canvas at the same time. (Fig. 31.)

Safety devices.—One large machine company is experimenting with a sewing-machine table that will do away with the danger to the operator from the shafting and belting underneath the machine. The table consists of two shafts, which are covered by a steel tubing, running on each side of the table through the transmission. The transmission is completely covered. The belting runs from the machine to the transmission directly beneath the table and is exposed only above the table, whereas in other types, the belting runs from the machine to the floor. This table has not proved completely satisfactory in actual use, but it is only a question of time when it will be perfected so that its general use will be possible.

Another device to insure safety to the operator consists of a box that covers the transmitter. It operates on hinges on the bottom of the footboard, and is fastened with a hook to the top of the machine. There is also a cover for the shafting and strap wheel, fastened to the gutter of the table, with the bottom resting on the footboard. This arrangement makes the guard easy to open for cleaning or sweeping under the machine. The coverings are made of sheet metal and are easily attached or detached. While this guard completely covers the shafting and belting, it does not permit the air to circulate under the table and causes the machine, especially in summer, to become very hot.

Pressing irons.—Up to about 1903 the irons used in the trade were the ordinary irons heated on a stove. About that time the gas iron was introduced, which was objectionable because it emitted a gas odor. This objection, however, was shortly afterwards removed through the introduction of the blower or air pump. Most of the irons used in the trade are heated by gas, as electricty, which is cleaner and more sanitary, is usually not as economical.

One type of blower iron in use is heated on the inside by compressed air and gas. The blower is run by a motor. The iron is made in all weights from 12 to 20 pounds, in length, from 7½ to 8½ inches, and in width, from 4¾ to 5¼ inches, depending upon the weight of the iron.

Another type of iron recently put on the market dispenses with the blower. It is a gas and air heated iron, requiring no motor, which can be attached to any gas fixture. It is heated internally by an intense, blue, odorless, noiseless gas and air flame, which can be regulated to any heat desired. The iron is equipped with a removable copper bottom, which better holds the heat, and it is claimed that no flame comes out of the sides. The iron is made in all weights from 12 to 22 pounds, in shapes broad and short or long and narrow, in lengths from 8 to 10½ inches and in width from 3⅞ to 6 inches.

Pressing machine.—There are many types of pressing machines on the market. One machine is very simple in construction and extremely strong, and requires very little floor space. No jumping is necessary. A short, quick, foot-pedal movement by the presser and his weight give more than enough pressure for the heaviest garment. This great pressure is secured from an automatic power compounder that can be adjusted as desired. The machine oils itself automatically. The iron on this machine is heated by a compound of air and gas. It moves straight up and down, without any sidewise motion, which, it is claimed, reduces gloss and prevents the cloth from stretching or curling. The buck is heated by gas only. The machine is especially well adapted, it is claimed, for getting a thin edge on overcoats.

Steam pressing machine.—Another type of pressing machine employs steam. Steam pressing machines are made in various shaped bucks for different garments, coats, pants, and vests. The machine can be directly connected with a steam plant, or is equipped with a boiler, so that it is independent. The boiler generates 50 to 65 pounds of steam, and is adapted for a natural or artificial gas or gasoline generating system. In some machines the heads and bucks are steam heated; in others only the head is heated. The head of the press is constructed so that the steam is diffused uniformly to all parts. The inside of the head is covered with asbestos noncorrosive filler, which prevents the goods from showing marks and the buttons from breaking. The foot lever is low, easily reached, and not in the presser's way. Steam is applied to the garment from the head, while usually the buck is continually steam heated and dry during the entire pressing operation. The steam pressing machine is a great producer. There is no question that pressing machines do more work than is possible by hand. It is estimated that the steam pressing machine will do the work of three men with hand irons. Continued steam pressing, however, is injurious to the garment, unless the fabric, linings, interlinings, and tapes have all been London shrunk; the steam will shrink any portion of the garment that has not previously received the maximum shrinkage.

TREATMENT AND PREPARATION OF CLOTH.

Every efficient clothing manufacturer tests his cloth for both strength and composition before such cloth is cut up. To test the cloth for strength, a small cut is firmly inserted into the jaws of the testing machine, and the jaws are then separated until the cloth breaks, a dial indicating the breaking strain. The weight and quality of the cloth will affect the breaking strain, and the cloth must be able to withstand a tensile strength test of at least 30 pounds to the square inch to be used in the manufacture of clothing. If the cloth is bought as all wool, it is next put through a wool test, the cloth being usually boiled in a solution of potash, in which the wool or silk is consumed, leaving as a residue the filament of any cotton that the cloth may contain. Tests are also made to determine the

quality and fastness of the colors, the cloth being treated with sulphuric or other acids or exposed to the weather for a week or more.

The bolt of cloth is next examined for defects, as cloth seldom comes from the mill without some imperfections. All goods should be examined before and after shrinking, though examination only before shrinking is usual. A bolt of goods is placed in an upright position on a revolving stand, and the cloth is unrolled and spread over a roller, back of which projects a triangular bar arrangement called spreaders, which stretches out the goods to the full width. The rollers are geared to a dial, which measures the cloth as the examiner pulls it down over the rollers.

The roller or drum is 1 yard in circumference, and every revolution of the roller registers 1 yard on the dial, which is marked to measure up to 100 yards of cloth. A yardstick is employed to ascertain whether the width is the same as was specified when the cloth was purchased.

The examiner pulls the cloth gently over the rollers and, while the machine registers the yardage, examines the cloth for defects. The examination is made in a north light, as that light is not affected by the sun. The examiner uses the naked eye only. The following are some of the defects found in an examination of the cloth:

Uneven shades, due to poor handling, which causes the dye to take unevenly.	Tender in warp or filling.
Streaks, a defect in the length of the goods caused by poor scouring, washing of the goods, or dyeing.	Holes.
Runners, a foreign thread running along the piece of the goods.	Changes in filling.
	Coarse fillings.
	Uneven fillings.
	Broken threads.
	Missed picks.

The examiner noting a defect ties a piece of narrow tape in the selvage, and frequently marks the imperfection with tailor's chalk. These marks are to notify the cutter of the existence of defects when he makes his lay.

If the defects in the cloth are serious, the cloth is returned to the mill. If not serious, it is used, the cutter laying out his patterns so that the damages will not affect the salability of the finished garment. A claim for an allowance, however, is made to the mill, which is usually one-eighth of a yard for every defect. Some allowances are settled on a percentage basis, ranging from 5 to 20 per cent. Some mills examine their goods before sending them out, and in this case also, one-eighth of a yard is usually allowed for each defect.

After the examination the goods are shrunk or sponged. The term sponging, though generally used in the trade, is a misnomer. Goods may be either steam or London shrunk. Goods are shrunk before being made up into a garment because the finished garment shrinks when it comes in contact with the moisture in the air or rain; it will not hold its original size and will water spot if the cloth has not previously been shrunk. The cloth shrinks because when it is being finished in the mill it goes through a process called tentering in which it is stretched. The tension of the machinery also stretches the goods. The use of live steam does not shrink the goods fully but only to a limited extent. In the center of the perforated cylinder over which the cloth is wound is a reheating coil, inside of which live steam is passed. The coil keeps the steam in a dry state. Should

the steam condense into water, and the water, instead of steam, pass through the cylinder perforations, the goods when made up and pressed would show water spots. The reheating coil in this machine insures live steam. In another machine the perforations are fortified on the inside with little tubes, which are kept constantly hot by the continuous passing of the live steam. These hot tubes prevent the steam that is to pass through the perforations from condensing into water.

The live steam permeates the cloth as it is wound around the cylinder. When the goods are entirely wound, a piece of heavy burlap is rolled around the goods and the cylinder is revolved with the steam passing through. The burlap serves to keep the moisture and dampness off the cloth.

London-shrinking is an English cold-water process. Woolen blankets are soaked in cold water, and the cloth is folded between the damp blankets. A weight of about 200 pounds is placed on top and the blanketed goods allowed to remain for about 12 hours. This is called putting in damp. The cloth is not permitted to come into direct contact with water, because a discolored cloth often results and because such a method would greatly increase the labor of the process. After dampening, the cloth is hung up on overhead bars, in accordion fashion, and permitted to dry. Natural air-drying is preferred, but when the cloth is required for immediate use, steam pipes or drying machines are employed. If the cloth is permitted to dry by natural air, it takes about 36 hours when the weather is damp and cold and about 24 hours when it is dry. The time necessary for proper drying depends also upon the weight of the cloth.

London-shrinking takes off the gloss and much of the cloth made up into clothing is therefore refinished. Refinishing may be accomplished in several ways. One method is to book-fold the shrunk goods, glazed cardboards being placed between the folds, and the goods then placed in a hydraulic press. The goods are kept in the press for about 24 hours, under a pressure of 2,200 pounds to 5,000 pounds, depending upon the weight and kind of fabric. Where goods have a tendency not to finish smoothly, previously heated cast-iron plates are put in the press between the pieces of goods.

Another method is to roll the goods between heavy smooth cloths. Steam is then passed through and the finish of the cloth is transferred to the fabric.

Worsteds and woolens that are steam-shrunk will shrink from three-fourths of an inch to 1 inch to each yard in the warp and filling. Cheviots and diagonally constructed goods, like serges, are liable to shrink more than the above in width, as much as 3, 4, or even 5 inches to the yard, but in warp only about 1 inch or slightly more.

Woolens and worsteds that are London-shrunk will shrink about 1½ inches to every yard in warp and filling if the construction is uniform. If the goods are not uniform in construction—that is, made of yarns of different numbers, etc.—they may shrink 2 inches to the yard in warp and 1 inch to the yard in filling, etc. There is no definite fixed shrinkage. Two pieces of the same material and yardage may show a variance of shrinkage. Excessive shrinkage is due to the stretching of the goods when they are finished in the mill.

The cost of steam-shrinking is about 1 cent per yard and of London shrinking about 3 cents per yard. The cost of examining goods is about one-half of a cent per yard.

There is no question as to the superiority of London-shrinking. Steam-shrinking hardens the fabric and makes it feel coarse. The shape of a coat made of goods London-shrunk is permanent, that of a coat of steam-shrunk material only temporary. A garment that has been London-shrunk will not require pressing for several weeks; a steam-shrunk garment requires pressing about twice a week to hold its shape. A steam-shrunk garment will shrink more with wear; a London-shrunk garment has received the maximum shrinkage in the first instance, and it will not shrink with use.

The various tests for determining the strength and composition of the fabric and dyes are usually performed by the clothing manufacturer. The examination of the cloth for defects is often made by the clothing house and often by an outside shrinking establishment. Shrinking, in New York and Rochester, is usually done by outside shrinking houses that do nothing else. In other clothing centers the very large houses do most of the shrinking themselves.

MANUFACTURING PROCESSES.

The processes of manufacturing clothing vary with the shop, according to the kind of product desired, the particular method of manufacture, and the degree of specialization. There are at present two distinct methods of manufacturing a coat. One is known as the closed method and the other as the open method. In the closed coat the linings and outer material are made up separately, laid together and stitched by a machine around the edges, and then turned like a bag. In the open method the linings and outside material are built up together, the former being fitted and adjusted to the outer fabric piece by piece. In the closed method the collar and undercollar are sewed respectively to the lining and the outer shell of the coat. In the open method the collar is made separate from the rest of the garment, and it is set in place by hand after the rest of the coat is put together. Until a few years ago, the closed method was generally used in the manufacture of ready-made clothing. At present, it is used only to a limited extent and only on cheap clothing. Some shops employ a combination of the open and closed methods.

The order of the processes and the number differ in two shops making the same grade of goods, especially coats. Some houses employ more handwork than others, some have more underpressing, and some more examination of the work while in process. It is impossible to draw up a single set of processes as applicable to the clothing trade. Following are the coat processes of two of the largest houses in New York, one manufacturing the highest grade and the other a medium grade of clothing:

HIGH-GRADE COAT.

1. Collar making.
2. Trimming.
3. Serging.
4. Pocket making.
5. Joining.
6. Seam and pocket pressing.
7. Lining making.
8. Sleeve making.
9. Stitching undercollar and sewing up sleeve lining.
10. Basting in sleeve lining.
11. Basting wigan on sleeves.
12. Canvas making.
13. Canvas basting.
14. Pocket tacking.
15. Lapel padding.
16. Canvas front pressing.
17. Shaping.
18. First basting.
19. Edge-tape sewing.
20. Edge-tape felling.
21. Edge-tape pressing.
22. Edge basting.
23. Second basting.
24. Drawing in armholes—shoulder-seam basting.
25. Armhole pressing.
26. Undercollar basting.
27. Felling in collar.
28. Sleeve basting.
29. Shoulder and sleeve sewing.
30. Sleeve pressing.
31. Undercollar pressing.
32. Armhole basting.
33. Collar covering.
34. Coat stitching.
35. Finishing.
36. Buttonhole cutting.
37. Buttonhole making.
38. Basting pulling.
39. Edge pressing.
40. Off pressing.
41. Button sewing.
42. Busheling.

MEDIUM-GRADE COAT.

1. Fitting.
2. Pocket making.
3. Joining.
4. Seam pressing.
5. Canvas basting.
6. Shoulder closing and collar making.
7. Front pressing.
8. Shaping.
9. Under basting.
10. Tape sewing.
11. Tape felling.
12. Tape pressing.
13. Edge basting.
14. Corner tacking.
15. Lining basting.
16. Sewing in sleeves.
17. Coat stitching.
18. Armhole pressing.
19. Armhole basting.
20. Buttonhole making.
21. Busheling.
22. Edge pressing.
23. Shape pressing.
24. Button sewing.
25. Coat pressing.
26. Brushing and cleaning.
27. Final pressing.

On account of variations of processes there is no standard by which the comparative production of various workers can be judged.

Cutters and pressers always, and shapers usually, are men in every shop and in every locality. Other operations performed by men in one shop may be performed by women in another. As a general rule it may be stated that men do the great proportion of machine work, basting, and those operations, like examining, brushing, etc., which require constant standing. The women do the great proportion of felling and handwork and minor operations, like tacking, sewing buttons, buttonholes, etc.

The following description of processes is not intended as a standard. They are the processes as they were found in one of the largest factories making a fine line of goods and will serve to indicate in a general way how factory ready-to-wear clothing is made. Designing has been omitted, as it is not strictly one of the processes. Minor operations have been omitted. The various examinations throughout the processes have been omitted, only the final examination being given.

COAT PROCESSES.

Cloth cutting.—The cloth is laid up either by the cutter or a helper, and the cutter then proceeds to make his lay—that is, to lay out the paper pattern of the desired style and size with the least waste of material. The cutter then marks the cloth with tailor's chalk. Some houses have a set of patterns for every size of a particular style. Others, however, having patterns for only a few sizes, the cutter must frequently, in marking his lay, allow for the size required. Often a customer wants his coat 2 inches shorter than the sample. The cutter in marking must not only do this but must so mark his pattern that the style will not be made ludicrous and out of proportion by the 2-inch shortening. In laying out the pattern the different parts of the garment must be marked out with regard to stripe or pattern matching, shade matching, and saving of material.

While the saving of material is an important function of the cutter, the use of more or less material depends to a great extent upon the manufacturing policy of the house. If the pants are made without a pieced crotch, one-eighth of a yard more will usually be required unless the pattern is reversed. Reversing the pattern often, however, makes the goods cut in this manner appear shaded. Some houses not particular as to the crease being parallel with the stripe, will lay in the pattern of the pants so as to take advantage of the edge of the cloth.

Most houses cut their goods folded, but in some of the very best houses the goods are cut on the open—that is, the goods are opened up to their full width. The goods after being marked are cut by shears, electric cutters, or long knives worked by hand. If the cutting is done by a long knife, the table contains iron-lined slots through which the knife is worked. Most houses employ the electric cutter, as it is most economical for bulk cutting. The long knife is used to some extent in cutting cloth, but its chief use is for cutting linings and trimmings. Shears are employed in many of the houses manufacturing the finest grade of goods. These houses usually cut the garments one or at most two at a time, because, making the finest line, their orders for any particular style and size are small, and two buyers will rarely purchase the same style without minor changes. The cloth being often stripes or plaids, it is very difficult to match these properly in order to permit bulk cutting. Shears are used to cut these single garments because shears are most convenient and accurate for cutting two or four thicknesses of cloth.

Lining and trimming cutting.—Linings and trimmings like canvas, haircloth, stays, pockets, etc., are cut by a trimming cutter, who usually is not as proficient as the cloth cutter. This cutting is generally done by electric machines or long knives.

From the cutter the cut goods go to the trimmer, who matches up the fabrics with the linings, buttons, and silk and assembles everything that is to be employed in making the garment.

Machine operating.—The darts are first sewed together on a sewing machine. The dart is the underarm cut, where the goods has been taken out to make the coat conform to the shape of the body. It is the line seam running from the armhole to the pocket. The same operator sews in the pockets. Pocket work is done in teams, one operator piecing the pocket and another sewing it in. (Fig. 32.)

Underpressing.—The pockets are then pressed. Throughout the processes underpressing is frequent, and is generally done on pressing machines of varying pressures. Light-pressured machines are used for the linings and seams, heavy-pressured machines for the canvas and for the edges on heavy overcoats. The iron of the pressing machine is heated by gas and can be used almost immediately after lighting. The pressure is secured by the presser standing on a foot lever.

Joining.—The seams of the coat are next closed on the inside on a sewing machine. The front, side, and back seams are closed, putting together the outer shell of the coat. The seams are then pressed on the inside.

Canvas making and padding.—Over a piece of canvas is fastened a piece of haircloth, then wigan, and then felt. The haircloth and felt are necessary to hold up the chest of the coat, the wigan to hold the front firm. The operator puts these four fabrics in proper position and sews them on a padding machine, which makes one zigzag stitch to hold them together. The needle of this machine works in a triangle. This machine can also be used for padding these parts, but in this factory the padding is done by hand. With needle and thread a girl sews several hundred half-inch zigzag stitches, which give the combined four parts strength and flexibility. The canvas is pressed after it has been padded. (Fig. 33.)

Canvas basting.—The canvas baster then bastes the cloth onto the padded canvas. The work is done by hand with needle and thread. The baster makes four or five rows of stitches of about one-half to three-fourths of an inch, the stitches running the length of the coat and according to the desired shape of the garment. The padded canvas is thus held in position until the coat is completed.

Lapel padding.—The canvas in the lapels of the coat is next padded or covered with numerous rows of small zigzag stitches about one-fourth of an inch long. The work is done by hand with needle and thread. Padding insures strength and flexibility. In some factories the lapel is padded by machine. The lapels and fronts are then pressed.

Shaping fronts and lapels.—The shaper gives the required form to the edge of the coat. With shears he trims off any unnecessary cloth or canvas on the lapel and front so that the edge is even and will not be unnecessarily thick when the coat is sewed. The shaper has cardboard patterns for the various style lapels. Selecting the proper one, he places it upon the garment and cuts the lapel to conform to this pattern.

Underlining or first basting.—The underliner receives the linings previously made by the lining maker. The lining has been seamed on a sewing machine, the facings sewed on, and the inside pocket made. The lining is then pressed. The underliner receives the coat after the lapels have been shaped, puts the inside and outside of the coat together, bastes the lining to the coat, and bastes the edges so that they can be sewed together. The facings are then pressed.

Taping edges, felling, and pressing tape.—A white tape about three-eighths of an inch wide is sewed around the edge of the coat on a sewing machine to prevent the edge from stretching. A great deal of skill is required in putting on this tape. If either too loose or too tight, it will make a poorly fitting coat.

The inner edge of the tape is felled to the canvas by hand.

The seam where the lining and the outside of the coat have been united is then pressed and the slight fullness of the cloth at the edge is shrunk. (Fig. 34.)

Edge basting, underbasting, and shoulder sewing.—The coat is then turned right side out. With comparatively fine hand stitches the entire edge of the coat is basted, to hold it even, preparatory to stitching.

The coat, after edge basting, goes to the second baster, who adjusts the lining of the coat to the outside. He bastes the lining in the proper place, and also bastes the plaits in the lining so that they will be in the proper places when pressed. These plaits are put in the lining to allow for expansion.

Each shoulder is seamed up on a sewing machine without any preliminary basting and is pressed.

Collar making.—Extreme care is taken in making the collar. The undercollar is first made. It consists of a piece of cloth of the same material as the coat or a piece of cloth used specially for this purpose. To this is fastened a piece of canvas, of which the leaf or standing part has been covered with machine-made stitches to make it firm and stiff. The undercollar maker then pads the canvas by hand with needle and thread, covering the entire canvas strip with small zigzag stitches of about one-fourth of an inch to give the undercollar strength and flexibility. To make sure that the collar will lie down flat on the coat, the cloth facing of the collar should be tight, while the canvas part should be loose. In the course of sewing this canvas, it is therefore necessary to work in a little fullness between the stitches to put the curve into the collar. The skill with which this hand stitching is done determines whether the collar will lie smooth and graceful or be bulgy and shapeless. This padding in other factories is often done by machine.

The undercollar is then pressed, basted into the neck, and shrunk by a presser to the proper size. The presser dampens the undercollar and presses it into the proper shape, taking out the fullness that has been allowed in the undercollar and canvas. The top collar (cloth) is then basted to the undercollar. (Fig. 35.)

Sleeve making.—The sleeves are first seamed up on the inside and the seams are pressed. The cuff or bottom is basted, the turnup, where the goods are doubled back, is tacked down by hand and the cuff is pressed.

The sleeve lining is seamed on a sewing machine, after which the seam of the lining is tacked by hand to the seam of the sleeve. The sleeve is then turned right side out, and the lining at the cuff or sleeve bottom is turned back and basted by hand.

With a special linen thread the entire armhole is stitched by hand, a chain stitch being employed. This stitching shortens the armhole to conform to the body of the coat. The armholes are then pressed.

In many houses the sleeves are basted in before they are sewed. In this factory, and in many others making the best grade of clothes, the sleeves are sewed in by machines without any preliminary basting. Sewing in sleeves without basting requires the greatest skill, and such operators are usually the best paid in the shop. The armhole is pressed after the sleeve has been sewed in.

The lining of the coat is then basted to the coat and to the collar at the neck and armholes, and the armholes are basted around with a heavy thread. At the same time small cotton pads to give the shoulder a well rounded appearance are inserted. (Fig. 36).

Finishing.—Finishing consists in felling the armholes, bottoms, sleeve linings, collar, shoulders, and everything that has been basted. In some shops felling is done by machines; in this factory one finisher does all the felling by hand.

Buttonhole making.—The coat goes to a man who marks the place for buttonholes, the points at which the buttonholes are to be made having been indicated by the cutter. The marker, using a pattern, marks with chalk the place for the lapel buttonhole, and with a ruler draws a line across the points designated by the cutter for the other buttonholes. With a hand punch, which has a blade the length of the required buttonhole, he then cuts the buttonhole through. There are two blades, a plain one for the lapel and another with an eyelet at the end, for the buttonholes. After the buttonholes have been cut, the coat goes to a girl who sews the buttonholes by hand. She uses a hook stitch and a heavy twisted silk thread, underneath which is a gimp (a rope-like thread). The gimp is led around the buttonhole and is overcast and looped by the silk thread. The buttonholes are then basted so that they will not stretch in pressing and are tacked on a special tacking machine or by hand. Some factories make their buttonholes by machinery.

Edge stitching.—The edges of the coat are then stitched on a machine. Starting at the bottom of the coat and up the front, the stitching continues around the collar and down the other front, so as to stitch the complete edging of the coat.

All basting threads that remain on the coat are pulled out by hand. All the edges of the coat are pressed on a high-pressured machine, the high pressure insuring a thin edge.

Off or final pressing.—The coat then goes to the presser, who with a hand blower-iron, heated internally by gas, presses the entire garment. He takes out all wrinkles, smooths out the lining, takes off the gloss caused by the heavy pressing machines, and gives the coat its proper shape. This pressing requires skill, as the final appearance of the coat is greatly affected by the presser's ability. (Fig. 37).

Button sewing.—After the places for buttons have been marked, by placing the buttonhole edge over the other and making a chalk mark through the buttonhole, a girl sews the buttons on by hand. The button must be firmly set in, properly tacked, and sewed through the canvas but not through the facing. Some factories sew their buttons on by machinery. The button sewer also sews on the already prepared coat hanger and size ticket and opens the buttonhole bastings.

Brushing, cleaning, examining, and busheling.—All thread and unnecessary tickets are removed and the coat is given a thorough brushing to remove all dust. Loose threads are picked off and others cut with scissors. Often the brushers are also examiners. The examiner looks for defects in the sewing, sees that the coat is the proper size, and looks to the general workmanship. The coats are tried on living models and examined as to fit for the various sizes. This is the final examination; other examinations have previously been held at certain stages of the work.

If the final examiner finds any defect in the garment, it is turned over to the busheler for alteration. The busheler is an all-around tailor who is generally capable of correcting all defects found by the examiner.

The coat is now ready for shipment. The coats are hung up on racks, each coat on a separate hanger, to prevent it from becoming wrinkled or crushed, so that repressing will not be necessary when the goods are shipped. (Fig. 38).

VEST PROCESSES.

Cutting.—See coat processes.

Welt trimming.—The making of the vest begins with the trimming of the welt, the patch or the flap of the pocket. The place for the pocket or welt is marked in the cutting room. The welt trimmer with shears cuts the welt to the proper length, according to the stripe or pattern of the material. The welt maker then seams up the darts on a sewing machine and also sews the three sides of the welt to the lining of the pocket. The sewing is done on the inside. The welt sewed to the pocket lining is turned right side out, and the edges of the welt are stitched on a machine. The stitched welt and dart seams are pressed, after which the welt is trimmed off to the proper width. The welt is then sewed to the fore part on a sewing machine, the place having been marked by the cutter. The operator, with the aid of a ruler, marks a straight line where the welt is to be sewed, care being exercised that stripes, etc., match.

Pocket-lining sewing.—The linings of the upper pockets are then sewed on a machine, after which both pockets are cut open with shears and the ends of the pockets notched so that they will, when pressed, lie smooth. The seams of the pockets, where they have been cut open, are then pressed. After pressing, the pockets are turned right side out, and the pocket linings trimmed to the proper length.

The pockets are stitched down to the underseam on a machine, so that the pockets will not be pulled out when in use. Another operator on a machine then stitches around the pockets, sewing them up.

The edge of the welt is tacked down on a single-needle machine, so that it will not pull out.

Wigan basting and trimming.—An operator on a chain-stitch machine bastes the wigan under each vest front with one row of chain stitches and another girl with shears trims the wigan to conform to the edge of the vest and also trims the armholes. The welt tacks are then pressed down.

Shaping.—The front edge, including the lapels, and the bottom edge of the vest are then trimmed by shears.

Lining making.—An operator on a machine seams the facing and the darts in the lining, and sews the front facing on the lining. The inside vest-pocket maker then makes the complete inside vest pocket, makes the welt, cuts it open with shears, turns the pocket in, tacks the corners of the welt, and sews up the pocket on the inside.

The underliner bastes together by hand with large stitches the facing that has been sewed to the lining and the right side of the vest.

Taping.—The neck pieces are seamed on a sewing machine. The operator then sews a tape about three-eighths of an inch in width around the front and bottom edges of the vest and around the armholes. The neck piece, seams, and tape are pressed and the vest is turned right side out.

Back making.—A machine operator then makes and sews on the buckle strap, seams up the dart and center back, and joins the inside and outside lining bottoms.

The front and bottom edges and the armholes are next stitched on a sewing machine.

Plait making and backing.—A girl hand-bastes a plait in the lining to allow for expansion, and also puts a few stitches in the width where the lining projects over the facing. She then cuts off the surplus lining with shears.

The operator receives the back lining already made and seams it on a sewing machine to the shoulders, sides, and armholes. The seaming is done on the wrong side. The vest is then turned right side out.

Buttonhole making.—The cutter marks the place for the top and bottom buttonholes. The buttonhole marker puts the top and bottom marks on a graduated board, which enables him to mark with chalk the places where the other buttonholes ought to be, according to the number of buttonholes for that particular style. He then places the vest on a chopping block, and with a mallet and a chisel-like blade having an eyelet at the end, chops out the buttonholes. The buttonhole is supposed to be one-half inch from the edge, but the marker uses only his eye in getting this distance.

The buttonholes having been cut, the vest goes to a girl who sews the buttonholes by hand. She uses a hook stitch and a heavy twisted silk thread underneath which is a gimp (a rope-like thread). The gimp is led around the buttonhole and is overcast and looped by the silk thread. The buttonholes are then basted so that they will not stretch in pressing.

Neck felling.—A girl fells the neck inside and outside, by hand, sews on the buckle, and tacks the buckle strap to the inside lining.

Off pressing.—The entire vest is then pressed with a hand blower-iron, heated internally by gas. The presser takes off the gloss caused by the heavy pressing machines, takes out wrinkles, smooths out the lining, and gives the garment its shape and finish.

Button sewing.—In the coat the buttonholes were placed over the other edge and a mark for buttons made through the buttonholes. In the vest a horizontal line is drawn even with the buttonholes. A point is then made by ruler, seven-eighths of an inch from the edge for the top button and five-eighths of an inch from the edge for the bottom button. A ruler is then drawn through these two points and a mark is made where this line intersects the horizontal lines. These intersecting points indicate where the buttons are to be sewed.

After the place has been marked for buttons, they are sewed on by hand. The buttons must be firmly set in, properly tacked, and sewed so that the stitches will not show through the facing. The button sewer opens the buttonhole bastings and sews on the size tickets.

Brushing, cleaning, examining, and busheling.—The cleaner, with a hand brush and whisk broom, brushes the vest thoroughly. He picks off loose threads and cuts other threads with small scissors. Often the brusher is also the examiner. He looks for defects in the workmanship and sees that the vest is the proper size. Some vests are

tried on to insure proper fit. This examination is the final one; throughout the various processes, at certain intervals, there have been examinations of the work up to that time.

The vest does not often require busheling, because it is of much simpler construction than the coat.

The vest is now ready for shipment. It is sent to the stock room to be assembled with the proper coat and pants.

PANTS PROCESSES.

Cutting.—See coat processes.

Basting crotch pieces.—A girl hand bastes the crotch pieces on each part. There are four parts, two front and two back.

Serging.—To prevent the edges from raveling, all the seams are serged on a special serging machine that makes a zigzag stitch.

Fly buttonhole making.—The fly buttonholes are generally made by machine. The place for the buttonhole is marked by the trimmer. The buttonhole machine sews around the buttonhole, and then a plunger knife cuts it through. The top and back pocket buttonholes are made by hand, being cut by shears and then sewed.

Piecing out, pocket stitching, and closing.—An operator on a machine makes both flies, sews in the front and back pockets, and sews the two fly pieces to the lining. The pockets are basted and pressed.

An operator on a machine then stitches around the pockets, after which the pockets are turned, closed up, and pressed.

This factory sews the pockets because it has been found that the serging machine occasionally misses a stitch resulting in a pocket with a hole.

Seaming.—The four separate parts of the pants, front and back of each leg, are matched up for seaming.

The seamer takes the front and back lengths for each side and sews the seams on a machine. The out-seam is usually a raised cord seam, made by first sewing a plain seam, then gathering or making a plait, and again seaming. The out-seam of each part is sewed first and then the in-seams are made and the buttonhole fly sewed on. The seams are then pressed.

In the case of pants for stout men, as a continuous waistband would be too loose, a separate waistband is sewed in after the out-seam has been stitched.

Serging fly, putting in canvas, top turning, and tacking.—The buttonhole fly is then serged on a special machine, which trims the edge and tacks down the end with a zigzag stitch. Canvas is sewed around the waistband by machine. The top of the pants and the pockets are hand basted, after which the top of the pants is pressed.

The pockets are tacked on a special tacking machine. The machine makes a definite number of stitches and makes a bar tack so that the pocket can not stretch or tear. Only the front pockets are tacked on this special machine. The back and watch pockets are tacked on the ordinary sewing machine.

Joining.—An operator on a machine then stitches the top of the pants, sews on the lower end of the belt loops, and seams the pants together in the crotch.

Fastening loops and finishing.—The loops, the lower ends of which have been sewed on by machine, are folded over the top of the pants

and sewed down by hand, on the inside just over the edge. The back seam is then pressed.

The finisher sews on the waistband on the inside and fells the waistband; she also sews on the fly buttons, the place for these buttons having been determined by placing the buttonhole fly over the other fly and making a chalk mark through the buttonhole. The finisher also sews on the top and back buttons. All the basting threads are now pulled out by hand.

Pressing.—A presser with a gas-blower iron shapes the legs of the pants, pressing them on the wrong side. An off presser with a gas-blower iron then presses the pants on the right side. He takes out the wrinkles, takes off the gloss caused by the heavy pressing machines, and gives the pants a finished appearance.

Brushing, cleaning, examining, and busheling.—All threads and unnecessary tickets are then removed. The pants are brushed thoroughly to remove all dust. The brusher is often the examiner also. He looks for defects in the sewing and general workmanship and sees that the pants are the proper size. This examination is the final one, but throughout the various processes, at certain intervals, there have been examinations of the work done up to that time.

The making of the pants is simple as compared with the making of the coat. Fit and lines are not so important and defects rarely occur, so that only occasionally are pants sent to the busheler.

The pants are now ready for shipment and are sent to the stock room to be assembled with the proper coat and vest.

CHAPTER IX.

FOREIGN TRADE.

IMPORTS.

The imports of clothing into the United States are almost negligible and are generally English overcoats, novelty garments like the Balmacaan, and golfing and motoring clothes. No sack suits are imported. The people in this country who demand English clothes are few. They reside usually in the seaport cities, New York, Boston, etc., and are in touch with England, either socially or commercially. A few people buy English clothes because of the English label. Some American manufacturers put fictitious foreign labels on American goods to please a certain class of purchasers.

English ready-made clothing is not comparable with the American. The English hand tailoring is poor, except in the finest custom work. Very conservative styles of men's clothing are worn in England; the models do not change from one season to another as they do in this country. High-salaried designers are employed by the larger clothing factories in the United States, who are constantly introducing attractive styles. Manufacturers in the United States assert that the styles of clothing made in other countries are so inferior to the styles originated in this country that the foreign product can find little sale here. The people of the United States have been educated to the belief that American clothing is better in style than the clothing made anywhere else in the world, and this belief is common with almost all classes of people. Even the workingmen in the United States demand style in the clothing they buy. The preference of the American public for American styles is a great protection to manufacturers of clothing.

American people believe not only that the styles of clothing for men that are originated in the United States are superior to those that come from other countries, but also that the workmanship of the domestic product is superior to the workmanship on ready-made clothing produced in foreign countries. This belief accounts, in a measure, for the tremendous increase in the production of factory-made clothing in the United States during the last 20 years.

While the manufacture of ready-made clothing is one of the large industries in the United States, this industry is of comparatively small importance in other countries. The completeness of the factory equipment, the thoroughness of the factory organization, and the efficiency of the working force, which are noticeable in many establishments for making men's clothing in this country, are not even approached in other countries. Nearly all the ready-made clothing manufactured in Europe is of low-grade, cheap varieties, and is almost invariably manufactured in small factories, in shops, or in the homes of the workers.

The statistics of imports do not separately specify the imports of men's clothing, but it is known that such imports are very small. No complaint about foreign competition was made by any manufacturers interviewed during this investigation.

The imports for consumption of wearing apparel, composed wholly or in part of wool, worsted, etc., during the 18 fiscal years 1898 to 1915 are shown in the following table:

TABLE 53.—IMPORTS FOR CONSUMPTION OF WEARING APPAREL, COMPOSED WHOLLY OR IN PART OF WOOL, WORSTED, ETC., AND DUTY COLLECTED, FISCAL YEARS ENDED JUNE 30, 1898, TO 1915.

Tariff acts.	Fiscal years.	Imports.		Duty collected.	Average value per pound.	Average ad valorem rate of duty.
		Pounds.	Value.			
Act of July 24, 1897: Manufactures composed wholly or in part of wool, worsted, the hair of the camel, goat, alpaca, or other animals: Clothing, ready made, and articles of wearing apparel made up or manufactured wholly or in part, not including hats of wool, knitted articles, shawls, cloaks, dolmans, jackets, talmas, ulsters, or other outside garments for ladies' and children's apparel, and articles of similar description or used for like purposes. Rate of duty, 44 cents per pound and 60 per cent ad valorem	[a]1898	169,235	$568,409	$415,506	$3.36	73.10
	1899	297,421	707,795	555,542	2.38	78.49
	1900	332,728	818,198	637,319	2.46	77.89
	1901	318,020	865,351	659,140	2.72	76.17
	1902	394,675	1,003,783	775,927	2.54	77.30
	1903	510,491	1,336,653	1,026,608	2.62	76.80
	1904	412,776	1,074,681	826,430	2.60	76.90
	1905	364,989	1,020,811	773,082	2.80	75.73
	1906	421,063	1,153,271	877,230	2.74	76.06
	1907	383,259	1,016,250	778,384	2.65	76.59
	1908	436,724	1,101,924	853,313	2.52	77.44
	1909	359,575	969,433	739,873	2.70	76.34
Act of Aug. 5, 1909: Same classification and rate	1910	525,452	1,353,074	1,043,043	2.58	77.09
	1911	607,264	1,794,081	1,343,645	2.95	74.89
	1912	576,040	1,608,156	1,218,351	2.79	75.76
	1913	476,009	1,481,068	1,098,085	3.11	74.14
Act of Oct 3, 1913: Manufactures composed wholly or in part of wool, worsted, the hair of the camel, goat, alpaca, or other animals: Clothing, ready made, and articles of wearing apparel, made up or manufactured wholly or in part, not including gloves, mittens, hats, shawls, hosiery, or other knitted articles. Rate of duty, 35 per cent ad valorem	[b]1914	302,929	901,380	674,115	2.98	74.79
	[c]1914	.....	732,320	256,312	.....	35.00
	1915	.....	1,317,649	461,177	.....	35.00

[a] July 24, 1897, to June 30, 1898. [b] July 1, 1913, to Dec. 31, 1913. [c] Jan. 1, 1914, to June 30, 1914.

By this table it will be seen that during the fiscal years 1898 to 1909, while the Dingley Act was in force, the computed ad valorem rate of duty varied from 73.10 to 78.49, and that during the fiscal years 1909 to 1913, while the Payne-Aldrich Act was in force, the computed ad valorem rate of duty varied from 74.14 to 77.09. By the Simmons-Underwood Act the rate was reduced to 35 per cent ad valorem.

The table shows that during the period from July 1, 1913, to December 31, 1913, the imports amounted to $901,380 under the rates of duty of the Payne-Aldrich Act; and during the period from January 1, 1914, to July 1, 1914, the imports amounted to $732,320 under the Underwood-Simmons Act, a total of $1,633,700 during the fiscal year 1914.

The following table shows the imports for consumption of specified articles of wearing apparel, manufactured of cotton, for 18 years, the fiscal years 1898 to 1915, inclusive:

TABLE 54.—IMPORTS FOR CONSUMPTION OF COTTON WEARING APPAREL, AND DUTY COLLECTED, FISCAL YEARS ENDED JUNE 30, 1898 TO 1915.

Tariff acts.	Fiscal years.	Value of imports.	Duty collected.	Rate of duty.
				Per cent.
Act of July 24, 1897: Wearing apparel of cotton or other vegetable fiber not otherwise provided for: Clothing, ready-made, and articles of wearing apparel of every description, made up or manufactured, wholly or in part, by the tailor, seamstress, or manufacturer, and not otherwise provided for; including neckties or neckwear, and all kinds of cotton gloves; not including corsets, collars and cuffs, hosiery, or other knit goods.	[a]1898	$546,744	$273,372	50.00
	1899	622,012	311,006	50.00
	1900	746,526	373,263	50.00
	1901	902,688	451,344	50.00
	1902	1,020,735	510,368	50.00
	1903	1,556,834	778,417	50.00
	1904	1,616,862	808,431	50.00
	1905	1,435,457	717,728	50.00
	1906	1,703,837	851,919	50.00
	1907	2,766,144	1,383,072	50.00
	1908	3,221,322	1,660,661	50.00
	1909	1,564,693	782,347	50.00
Act of Aug. 5, 1909: Wearing apparel composed of cotton or other vegetable fiber not otherwise provided for: Clothing, ready made, and articles of wearing apparel of every description, of which cotton or other vegetable fiber is the component material of chief value, made up or manufactured wholly or in part by the tailor, seamstress, or manufacturer, and not otherwise provided for; including neckties or neckwear, gloves, except for men and boys; not including corsets, collars and cuffs, hosiery, or other knit goods.	1910	2,028,539	1,014,269	50.00
	1911	1,884,849	942,425	50.00
	1912	1,871,477	935,739	50.00
	1913	2,277,876	1,138,938	50.00
	[b]1914	676,684	338,342	50.00
Act of Oct. 3, 1913: Wearing apparel composed of cotton or other vegetable fiber, except flax, hemp, or ramie, or of which cotton or other vegetable fiber is the component material of chief value, or of same with india-rubber: Clothing, ready-made, and articles of wearing apparel of every description, made up or manufactured wholly or in part by the tailor, seamstress, or manufacturer, not especially provided for; including neckties or neckwear; not including corsets, gloves, collars and cuffs, hosiery, or other knit goods.	[c]1914	387,926	116,378	50.00
	1915	310,809	93,243	50.00

[a] July 24, 1897, to June 30, 1898. [b] July 1, 1913, to Oct. 3, 1913. [c] Oct. 4, 1913, to June 30, 1914.

The imports shown in this table include shirts and other garments for men and garments for women and children. It is impossible to say how large were the imports of any particular kind of cotton clothing.

As shown by Table 53, the imports of woolen wearing apparel amounted to $1,633,700 ($901,380+$732,320) during the fiscal year 1914, and as shown by Table 54, the imports of cotton wearing apparel amounted to $1,064,610 ($676,684+$387,926) during the same year. The total imports of woolen and cotton wearing apparel, including ready-made clothing for men, women, and children, during the fiscal year 1914 amounted to $2,698,310. This amount is a very small proportion of the value of the production of men's and boy's clothing in the United States, as reported by the Census of Manufactures and as shown by Table 3. The production of such clothing in the United States in 1909 was $485,677,493.

The rates of duty on woolen cloths, as well as the rates on woolen clothing, prescribed by the tariff act of 1913 became effective January 1, 1914. It was expected that on account of the reduction in the rates of duty there would be large imports of woolen cloths. The field work in this investigation was done during the spring of 1915. Very few of the establishments that reported had used any foreign fabrics in the clothing they had manufactured during the previous year. Of the 64 establishments canvassed only 8 stated that they had used any foreign fabrics or outer cloths. Of the fabrics used by these 8 manufacturers one manufacturer stated that he imported 15 to 18 per cent, three imported 4 per cent, one 1 per cent, and three a still smaller percentage. Some of these 8 manufacturers also imported woolen linings, canvas, and velvet to a limited extent. Many manufacturers who were interviewed during this investigation claimed that American materials are generally, at the present time, equal to English fabrics except in the very expensive grades.

EXPORTS.

The exports of clothing from the United States are insignificant as compared with the domestic production. Most of the exports of clothing before the war began in Europe were sent to North American countries, principally Canada and Mexico. The exports of clothing to Europe were very small before the war began, but a few of the larger manufacturers have sold goods to retailers in London, Berlin, Vienna, Paris, Sydney, Melbourne, and other large cities, usually on the same terms as they sell their goods in this country. Clothing that is exported to European cities is manufactured in American styles from European fabrics imported in bond. The first American clothing sold in Europe was marketed in England about 1907 or 1908. The most significant result of the export of American clothing to Europe has been the effect on the English ready-made clothing manufacturers, who, since the introduction of American clothes, have improved their product to a considerable extent.

In cheap clothing American manufacturers can not compete with the foreigners in their own market, as the cost of manufacturing in the United States is much higher because of the difference in the cost of labor. German wholesale ready-made manufacturers still have farmers' wives making up entire garments. The foreigner who wants a good suit goes to his custom tailor.

In Europe the majority of people have both the means and the desire for good clothing. A start has been made by several American firms selling ready-made clothing. American manufacturers should enter on a campaign to educate Europeans to the advantages of ready-made clothing, the superiority of American workmanship, and the reasonable prices that put good ready-made clothing within the reach of everyone. The same demand for ready-made clothing that exists in this country can be created in Europe by earnest, insistent, and honest effort. The adherence of European manufacturers to obsolete manufacturing methods gives the efficient American manufacturer his greatest opportunity.

With a few exceptions American manufacturers have done little to develop an export trade outside of Canada and Mexico. What little clothing is exported to Central and South America is usually sold through a buyer or agent resident in this country. American manufacturers claim that the South American tariffs are too high and operate against them, but that with more favorable tariffs American manufacturers could do considerable business. The South American trade demands long selling terms and liberal credit, which American manufacturers have generally been unwilling to extend, demanding payment for the goods or a guaranty from the agent. American banking connections were poor. There was no personal business relationship between the American manufacturer and his South American customer. Seldom, if ever, did the American manufacturer's salesman visit South America.

There is one lesson that American manufacturers who desire a profitable foreign trade can learn from successful European exporters. In the past American manufacturers have made the same goods for foreign markets as for the American market, with the attitude that the foreign merchants could take it or leave it. The service of some commodities, for example of a watch, would be the same in New York or Vienna. But in wearing apparel a different condition presents itself. The South American or European does not want American styles. What he desires is his own ideas worked out in up-to-date American factories. The success of the foreign exporter is due to his catering to the needs and desires of his export trade. American manufacturers must do likewise. They must study foreign conditions, and foreign languages, and familiarize themselves with the customs, needs, and desires of their prospective customers.

Though South America offers some field for the exportation of clothing, Europe, South Africa, and Australasia offer the greatest opportunity. The majority of the people in South America wear only shirts and trousers and those of the cheapest cotton material.

The 64 establishments that reported during this investigation were asked what percentage of their net sales was exported and what efforts they had made to build up a foreign trade. One establishment reported that 10 per cent of its net sales was exported, and two that 1 per cent of their net sales was exported. Seven other establishments reported small exports. The countries to which exports were made by these 10 establishments, so far as stated, are Canada, the Bahamas, Cuba, Mexico, Panama, Peru, and Australia. It is known, however, that one large establishment that declined to report has exported goods to London, England.

Most of the manufacturers who were interviewed in regard to export trade confessed that they took little interest in it, so little in fact that they had not even made inquiries about the best means of establishing such a trade.

Mr. W. R. Corwine, of New York City, secretary of the National Association of Clothiers, in 1915 said in an interview with an agent of the Bureau:

> There has been no systematic effort to introduce American clothing in South America.

A manufacturer in Chicago said:

> We have made no investigation of the conditions surrounding the possibility of export business, have no information, and, therefore, are not in a position to answer intelligently on this subject.

A member of a very large establishment in New York City said:

> I believe that the American manufacturer does not adapt himself to exporting trade. It apparently seems to be too troublesome for him. We have not attempted to establish a foreign trade, although we might enter into this through an expert exporter who claims to be able to place our merchandise in South America as well as in Spain.

A member of another large firm in New York City said:

> We intend going into South American export trade. South America is coming to the United States for clothing. American manufacturers have regarded South America as a dumping ground for any of their old merchandise, with the idea that if the goods were taken, well and good, and if they were not taken it did not make any difference. They never really cared for the trade.

The president of another large clothing-manufacturing company in New York City made the following statement:

> We have not done enough foreign trade to say whether it is profitable or not. To some extent we have endeavored to establish foreign trade by sending salesmen to South America and the West Indies. The results have not been worth considering, as the class of goods that we manufacture is too high for the retail trade when landed in most countries with duties added. We understand that there is a limited foreign demand, mostly from South America, but not in our grade of goods.
>
> Goods for export sold by us have usually been sold through export agents, to whom we have paid commissions. Export agents with whom we have done business have usually guaranteed payments.
>
> In our opinion foreign trade has not grown faster because the representatives of American factories have not been natives of the countries in which they have traveled and have not taken the foreign business seriously enough, nor have they been, in our experience, good enough salesmen.

Some manufacturers who were interviewed expressed the belief that a sale for two-piece suits could be found in Central and South American countries. Under a section of this chapter headed "Reports from American Consuls," p. 287, will be found communications from representatives of the United States in other countries explaining opportunities for establishing or extending trade in men's clothing in those countries.

The following table shows the value of the woolen wearing apparel of all kinds made in the United States and exported to the various countries of the world during the fiscal years ended June 30, 1908 to 1915:

TABLE 55.—DOMESTIC EXPORTS OF WOOLEN WEARING APPAREL, BY COUNTRIES, DURING THE YEARS ENDED JUNE 30, 1908 TO 1915.

Countries.	1908	1909	1910	1911	1912	1913	1914	1915
EUROPE.								
Austria-Hungary	$180	$616	$896	$2,082	$225	$453	$3,882	$1,600
Azores, and Madeira Is.	.....	1,239	100	.....	678	236	255	.....
Belgium	92	40	510	732	2,536	2,375	909	168,308
Denmark	160	100	47	.....	118	2,258	.....	6,570
Finland	.....	.....	.....	.....	.....	95	105	.....
France	2,485	167	3,303	14,982	2,648	2,871	15,140	5,235,029
Germany	16,240	3,657	9,739	2,685	263	9,907	12,945	50
Gibraltar	400	.....	.....	.....	.....	.....	.....	.....
Greece	.....	.....	.....	.....	.....	.....	.....	9,113
Italy	3,115	2,222	.....	45	.....	3,980	4,741	4,639
Netherlands	710	.....	250	185	10	130	792	43,320
Norway	612	315	156	.....	.....	561	820	620
Portugal	.....	18	.....	.....	.....	12	289	49
Russia in Europe	176	175	.....	.....	.....	30	421	770
Serbia, Montenegro, and Albania	.....	.....	.....	.....	.....	.....	.....	8,125
Spain	288	.....	.....	.....	.....	275	40	50
Sweden	180	596	375	.....	.....	663	1,239	115
Switzerland	.....	.....	.....	.....	.....	.....	25	.....
Turkey in Europe	90	.....	50	.....	120	11,041	57,881	2,187
United Kingdom:								
England	39,203	24,795	18,715	20,859	17,081	132,672	50,639	1,631,376
Scotland		1,144	691	698	785	993	1,190	3,278
Ireland		215	50	.....	.....	.....	.....	359
NORTH AMERICA.								
Bermuda	1,395	2,440	1,452	160	826	1,826	1,639	402
British Honduras	2,254	3,672	812	620	3,746	4,013	5,162	3,142
Canada	923,815	825,810	997,981	937,410	1,105,572	1,456,950	1,389,126	1,107,243
Central American States:								
Costa Rica	9,699	4,253	2,857	2,800	5,137	2,499	2,031	649
Guatemala	18,382	8,324	2,122	6,520	10,351	31,889	22,985	11,221
Honduras	5,308	3,195	1,082	1,919	6,470	6,638	13,096	15,332
Nicaragua	2,712	2,898	6	2,102	4,492	4,834	5,344	2,852
Panama	43,631	58,372	44,840	9,141	36,330	33,913	65,527	27,717
Salvador	1,038	2,336	166	1,455	2,439	1,582	1,796	50
Mexico	363,910	288,042	335,692	278,802	299,614	402,803	227,709	350,385
Miquelon, Langley, etc.	715	100	184	151	59	.....	119	425
Newfoundland and Labrador	5,234	4,169	12,482	9,850	7,486	17,507	3,622	3,835

TABLE 55.—DOMESTIC EXPORTS OF WOOLEN WEARING APPAREL, BY COUNTRIES, DURING THE YEARS ENDED JUNE 30, 1908 TO 1915—Continued.

Countries.	1908	1909	1910	1911	1912	1913	1914	1915
NORTH AMERICA—contd.								
West Indies:								
British—								
Barbados	$3,364	$1,128	$2,043	.....	$271	$776	$217	$246
Jamaica				$491	1,948	3,706	507	944
Trinidad and Tobago				672	1,018	665	65	79
Other British				932	1,723	4,112	2,419	1,496
Cuba	71,992	108,688	36,722	19,565	22,209	50,792	20,427	13,326
Danish	71	194	302	27	7	.....	1,811	542
Dutch	111	.....	73	.....	12	337	38	.....
French	.....	.....	.....	.....	.....	.....	220	27
Haiti	1,577	372	17	20	642	109	3,255	21
Santo Domingo	2,840	2,618	2,268	62	2,680	3,150	3,615	1,072
SOUTH AMERICA								
Argentina	69,371	29,461	27,960	66,507	104,784	120,647	93,160	29,323
Bolivia	.....	360	.....	194	4	1,224	316	1,680
Brazil	864	342	2,920	73	2,932	2,112	1,212	1,884
Chile	743	.....	.....	26	67	359	3,335	15,076
Colombia	995	662	2,547	226	18,906	412	935	1,006
Ecuador	2,263	12	137	98	60	68	94	384
Guiana:								
British	30	.....	.....	.....	25	.....	90	20
Dutch	118	10	.....	.....	319	143	30	.....
Paraguay	.....	.....	.....	.....	.....	1,389	1,330	7
Peru	734	168	445	183	.....	1,161	1,993	1,115
Uruguay	1,427	150	.....	720	.....	583	1,384	2,214
Venezuela	3,845	371	2,907	384	1,154	785	996	3
ASIA.								
China	828	2,413	3,768	1,553	6,175	3,498	4,318	6,533
China, leased territory:								
British	.....	.....	.....	.....	.....	.....	472	.....
French	.....	.....	.....	897	.....	.....	.....	.....
Chosen (Korea)	137	234	384	8	.....	.....	.....	533
East Indies:								
British—								
British India	824	96	115	.....	90	525	772	718
Straits Settlements	96	.....	.....	.....	.....	282	.....	2
Hongkong	1,254	512	7,006	53	17,595	145	89	36
Japan	2,304	1,644	3,965	460	2,101	1,263	755	514
Russia in Asia	2,500	686	1,005	152	558	3,332	335	271,679
Siam	5	14	2	.....	130	.....	.....	.....
Turkey in Asia	.....	.....	.....	.....	.....	3,264	53,446	1,310
OCEANIA.								
British:								
Australia and Tasmania	9,929	13,642	1,722	2,109	6,115	24,663	35,262	12,423
New Zealand	2,196	487	832	1,120	263	8,220	1,585	771
Other British	.....	3	21	.....	24	44	2	289
French	5	.....	.....	.....	.....	.....	194	79
German	.....	.....	.....	.....	2	.....	.....	.....
Philippine Islands	86,285	14,020	17,805	44,993	35,496	31,643	12,772	93,226
AFRICA.								
Belgian Kongo	.....	.....	55	.....	.....	45	.....	.....
British Africa:								
West	130	.....	.....	286	.....	.....	103	165
South	7,710	2,612	5,162	15,179	8,226	7,130	10,383	10,227
East	90	.....	181	.....	.....	.....	.....	553
Canary Islands	.....	.....	.....	.....	.....	.....	.....	.....
French Africa	.....	55	.....	.....	.....	.....	.....	.....
German Africa	13	.....	.....	.....	.....	.....	.....	.....
Liberia	.....	225	172	200	.....	652	533	559
Portuguese Africa	1,098	30	.....	.....	.....	84	246	.....
Turkey in Africa: Egypt	.....	.....	.....	87	.....	.....	.....	.....
Total	1,717,833	1,420,125	1,555,184	1,450,475	1,743,022	2,460,326	2,148,235	9,108,900
RECAPITULATION.								
Europe	63,931	35,299	34,972	42,268	24,464	168,552	151,313	7,115,558
North America	1,458,108	1,316,611	1,441,101	1,272,699	1,513,532	2,078,101	1,770,730	1,541,008
South America	80,390	31,536	36,916	68,411	126,251	128,883	104,925	52,717
Asia	7,948	5,599	16,245	3,123	26,649	12,309	60,187	281,325
Oceania	98,415	28,158	20,380	48,222	41,900	64,570	49,815	106,788
Africa	9,041	2,922	5,570	15,752	8,226	7,911	11,265	11,504

Considering the exports for the fiscal year ended June 30, 1914, a month before the war began in Europe, it will be seen that the total domestic exports of woolen wearing apparel amounted to $2,148,235. Of this amount, the exports to countries in North America amounted to $1,770,730. Of the woolen wearing apparel exported to South America, $104,925, Argentina took the largest share, $93,160.

The exports of woolen wearing apparel amounted to $1,717,833 during the fiscal year 1908, and to $2,148,235 during the fiscal year 1914, an increase of $430,402, or 25.05 per cent, in six years. It will be noticed, however, that the increase was not uniform from year to year.

The following table shows the value of the cotton wearing apparel of all kinds, except corsets, hosiery, and other knit goods, made in the United States and exported to the various countries of the world during the fiscal years ended June 30, 1908 to 1915:

TABLE 56.—VALUE OF DOMESTIC EXPORTS OF COTTON WEARING APPAREL (NOT INCLUDING CORSETS, HOSIERY, AND OTHER KNIT GOODS) FROM THE UNITED STATES DURING THE FISCAL YEARS ENDED JUNE 30, 1908, TO 1915.

Countries.	1908	1909	1910	1911	1912	1913	1914	1915
EUROPE								
Austria-Hungary	$287	$913	$1,728	$3,691	$3,050	$5,368	$8,665	$1,530
Azores and Madeira Is	422	.....	268	179	105	14	188	.....
Belgium	4,800	662	2,785	11,615	35,617	34,999	27,450	116,365
Bulgaria	.....	.....	.....	.....	.....	.....	.....	200
Denmark	2,589	1,915	5,236	6,698	5,728	7,779	12,915	4,251
Finland	.....	.....	.....	.....	.....	168	140	.....
France	5,116	2,887	7,664	9,259	11,796	9,954	29,237	1,116,852
Germany	88,903	114,022	23,163	73,036	68,979	13,397	7,828	403
Gibraltar	.....	.....	.....	.....	.....	20	.....	.....
Greece	.....	626	429	737	382	735	1,610	15,619
Italy	9,639	4,590	11,170	8,005	10,946	9,183	1,512	3,765
Malta, Gozo, etc	.....	.....	.....	70	.....	.....	400	.....
Netherlands	18,607	22,290	34,835	33,859	41,068	3,984	1,468	5,751
Norway	2,127	853	2,324	3,470	6,321	2,477	755	2,942
Portugal	202	39	877	185	173	236	472	3,542
Roumania	.....	.....	7	.....	.....	24	.....	.....
Russia in Europe	21	.....	.....	.....	25	204	20	367
Serbia, Montenegro, and Albania	.....	.....	.....	.....	.....	.....	.....	4,930
Spain	1,003	25	276	62	981	510	.....	2,803
Sweden	2,440	870	1,015	1,922	3,900	2,581	991	8,237
Switzerland	3,544	2,062	4,105	8,707	1,112	2,889	1,235	304
Turkey in Europe	1,060	.....	132	1,166	3,884	6,260	1,433	500
United Kingdom—								
England	371,559	263,436	303,621	402,575	593,838	203,100	102,224	7,450,951
Scotland		5,616	9,673	12,998	10,667	19,005	18,154	167,096
Ireland		226	1,586	194	.....	.....	.....	814
NORTH AMERICA.								
Bermuda	12,495	15,432	21,414	24,365	36,104	20,134	20,684	19,714
British Honduras	36,036	16,565	31,326	38,733	29,444	30,124	56,185	37,482
Canada	764,299	931,831	1,540,365	1,881,262	2,596,126	2,569,381	2,489,435	2,390,317
Central American States:								
Costa Rica	20,303	10,734	30,675	40,471	50,005	35,751	25,301	20,418
Guatemala	20,669	13,403	11,415	31,952	30,413	36,434	38,488	23,198
Honduras	40,959	30,296	31,838	72,297	63,636	98,326	146,996	115,761
Nicaragua	33,527	27,394	32,204	57,311	64,926	91,133	110,413	35,120
Panama	310,271	359,342	521,473	428,489	584,608	498,673	415,035	324,368
Salvador	2,923	950	1,527	4,328	3,357	5,573	3,319	1,617
Mexico	376,742	232,619	274,709	301,901	340,461	363,787	450,503	1,105,494
Miquelon, Langley, etc	339	34	444	480	549	308	611	479
Newfoundland and Labrador	27,123	34,838	50,467	88,791	88,077	97,002	128,994	62,580
West Indies:								
British—								
Barbados	79,514	51,151	105,899	7,719	7,574	4,843	7,625	6,345
Jamaica				80,400	116,925	74,726	106,986	67,403
Trinidad and Tobago				27,656	29,093	20,752	40,020	36,250
Other British				28,326	32,016	30,435	37,379	30,543
Cuba	247,940	234,910	309,742	376,100	463,207	535,588	592,559	684,471
Danish	2,693	5,850	7,165	10,157	16,951	8,847	8,156	3,186

TABLE 56.—VALUE OF DOMESTIC EXPORTS OF COTTON WEARING APPAREL (NOT INCLUDING CORSETS, HOSIERY, AND OTHER KNIT GOODS) FROM THE UNITED STATES DURING THE FISCAL YEARS ENDED JUNE 30, 1908, TO 1915.—Contd.

Countries.	1908	1909	1910	1911	1912	1913	1914	1915
NORTH AMERICA—contd								
West Indies—Continued.								
Dutch	$8,382	$3,318	$7,508	$6,935	$13,609	$8,107	$11,858	$13,985
French	266	542	490	1,309	1,722	808	472	256
Haiti	2,017	3,379	4,199	6,539	15,437	57,644	4,747	2,001
Santo Domingo	21,876	19,962	19,471	23,067	55,795	51,547	34,259	29,554
SOUTH AMERICA.								
Argentina	2,400	7,122	14,817	42,837	77,411	120,700	50,321	36,432
Bolivia	2,135	881	2,270	7,041	5,156	5,619	23,514	3,706
Brazil	14,588	9,769	50,751	83,431	80,911	134,150	61,843	20,915
Chile	3,465	3,001	4,324	7,326	19,538	31,215	37,431	36,751
Colombia	26,906	21,977	30,819	28,392	36,767	25,291	20,758	23,073
Ecuador	8,771	3,995	7,898	12,940	12,868	13,628	21,138	26,491
Guiana:								
British	2,982	1,400	2,554	2,137	1,995	1,577	1,077	1,966
Dutch	2,673	2,181	1,798	2,756	3,093	1,617	2,068	2,407
French	176	.....	.....	27	198	.....	15	30
Paraguay	.....	.....	.....	.....	472	150	1,221	.....
Peru	18,940	4,609	7,367	18,497	25,104	34,678	40,975	23,486
Uruguay	7,307	1,561	3,916	11,643	11,475	20,205	10,573	7,092
Venezuela	2,584	521	4,052	5,495	9,411	2,545	7,020	8,185
ASIA.								
Aden	.....	.....	.....	.....	.....	10	30	.....
China	6,439	22,349	22,197	13,692	31,856	59,739	26,324	14,359
China, leased territory:								
British	.....	.....	.....	.....	.....	.....	337	.....
German	.....	.....	12	.....	50	.....	.....	.....
Japanese	.....	.....	56	396	30	41	.....	25
Chosen (Korea)	552	2,567	463	1,400	1,840	2,184	832	256
East Indies:								
British—								
British India	3,124	1,765	1,930	3,672	4,600	21,567	22,253	13,014
Straits Settlements	50	600	539	472	905	1,353	2,405	1,052
Other British	.....	70	.....	62	468	1,292	1,453	123
Dutch	1,894	1,444	3,053	3,326	4,101	3,245	1,699	934
Hongkong	4,553	3,214	3,856	14,718	20,730	12,334	26,081	6,232
Japan	7,929	5,828	8,290	7,975	8,502	11,693	12,905	5,421
Persia	.....	.....	.....	10	.....	.....	.....	.....
Russia in Asia	4,443	1,028	2,042	3,669	2,134	1,902	5,305	3,106
Siam	490	9	139	508	907	1,209	605	255
Turkey in Asia	899	1,400	1,941	3,092	5,975	6,064	6,518	50
OCEANIA.								
British:								
Australia and Tasmania	178,086	217,490	284,483	370,476	417,320	76,575	98,679	75,775
New Zealand	98,027	86,967	86,494	130,253	118,579	35,129	34,951	41,700
Other British	2,799	1,989	2,385	8,602	4,274	3,408	4,507	3,190
French	5,981	6,642	11,284	20,038	14,710	17,780	34,733	16,150
German	1,124	1,728	1,978	1,613	2,924	1,786	3,406	1,338
Philippine Islands	136,506	288,707	420,737	387,848	543,117	419,469	384,206	378,974
AFRICA.								
Belgian Kongo	.....	25	131	112	200	50	.....	.....
British Africa:								
West	869	65	996	286	351	646	269	737
South	142,319	110,694	144,290	215,421	199,392	163,441	93,277	60,541
East	70	145	122	154	41	85	29	29
Canary Islands	3,000	165	160	.....	.....	.....	609	100
French Africa	179	338	462	529	109	150	.....	168
German Africa	81	505	522	.....	225	38	553	117
Liberia	2,048	1,000	1,789	2,444	1,905	820	978	342
Morocco	.....	.....	.....	.....	.....	.....	.....	11
Portuguese Africa	2,749	2,725	5,700	6,985	10,023	10,505	11,107	8,651
Spanish Africa	.....	.....	45	.....	143	.....	.....	.....
Turkey in Africa: Egypt	897	608	1,034	1,012	905	1,752	1,300	1,600
Total	3,218,728	3,230,342	4,550,921	5,538,303	7,119,580	6,211,724	5,999,887	14,743,148
RECAPITULATION.								
Europe	512,319	421,032	410,894	578,428	798,740	322,859	216,557	8,907,222
North America	2,008,374	1,992,250	3,002,331	3,538,588	4,640,035	4,640,223	4,730,025	5,011,142
South America	92,927	57,017	130,566	222,522	284,399	394,375	277,954	190,534
Asia	30,373	40,274	44,518	52,992	82,188	122,633	106,747	44,827
Oceania	422,523	603,499	807,361	918,830	1,100,924	554,147	560,482	517,127
Africa	152,212	116,270	155,251	226,943	213,294	177,487	108,122	72,296

Considering the exports for the fiscal year ended June 30, 1914, it will be noted that Canada is by far the most important market for cotton wearing apparel. Such exports to that country in the fiscal year 1914 amounted to $2,489,435, or 41.49 per cent of the total. Trade with Canada has grown rapidly, having increased more than threefold from 1908 to 1914. Cuba, Mexico, Panama, and the Philippine Islands, in the order named, are the other important markets.

From 1908 to 1914 the increase of such exports to all North American countries was 135.52 per cent; to all South American countries, 199.11 per cent; to all Asiatic countries, 250.34 per cent; to Oceania, 32.65 per cent. Such exports to all countries in Europe decreased 57.73 per cent, and those to all countries in Africa decreased 28.97 per cent.

The following table shows, by customs districts, the value of the domestic exports during the fiscal years 1914 and 1915, of woolen wearing apparel and of cotton wearing apparel, not including corsets or knit goods:

TABLE 57.—VALUE OF DOMESTIC EXPORTS OF WOOLEN WEARING APPAREL, AND OF COTTON WEARING APPAREL, OTHER THAN KNIT GOODS AND CORSETS, BY CUSTOMS DISTRICTS, FISCAL YEARS OF 1914 AND 1915.

Customs districts.	Woolen.		Cotton.	
	1914	1915	1914	1915
Maine and New Hampshire	$37,572	$32,086	(a)	(a)
Massachusetts	21,977	208,992	$89,981	$73,127
New York	528,936	7,305,268	2,307,298	10,652,862
New Orleans	25,277	29,107	369,973	221,230
Arizona	51,211	31,078	76,710	108,979
El Paso	105,859	254,721	255,228	665,738
San Francisco	(a)	(a)	349,717	375,827
Washington	179,076	126,827	121,786	101,393
Buffalo	438,642	306,162	986,712	1,066,589
Dakota	270,217	165,439	478,042	270,494
Duluth and Superior	68,939	86,533	57,725	121,880
Vermont	b 71,254	31,397	180,711	123,934
Michigan	59,615	46,498	127,990	93,365
St. Lawrence	236,052	308,124	478,277	565,617
All other districts	53,608	176,668	139,737	302,133
Total	2,148,235	9,108,900	5,999,887	14,743,148

a Included in "All other districts." b Western Vermont only.

IMPORTS INTO OUTLYING TERRITORIES AND FOREIGN AMERICAN COUNTRIES.

The value of the imports of men's and boys' clothing into foreign countries of the Western Hemisphere and into Porto Rico, Hawaii, and the Philippine Islands is shown below. The statistics are as nearly complete as can be obtained from the official reports of the various countries. The classification in each case is that of the country for which the data are given. In the case of many countries the imports of men's and boys' clothing are not specifically reported, but are included under the headings of "Clothing" or "Wearing apparel" and are so shown here.

Statistics of the imports of the various kinds of wearing apparel, so far as they are specified in the official reports of the countries mentioned below, appear more fully in a report on the cost of production of women's muslin underwear, previously issued by the Bureau of Foreign and Domestic Commerce.

ARGENTINA.[a]

"All other wearing apparel," excluding underwear, hosiery, shirts, neckties, corsets, hats, gloves, ponchas, edgings and trimmings (passementerie), handkerchiefs:	
Cotton	$1,290,626
Wool	1,214,732
Wool mixed	47,869
Silk	535,423
Silk mixed	35,784
Linen	145,237
Other fibers and mixed fibers	71,404
Total	3,341,075

BAHAMAS.[b]

Cotton, woolen, linen, and silk wearing apparel	275,556

BARBADOS.[b]

Wearing apparel, except haberdashery and headwear	121,006

BERMUDA.[b]

Clothing	210,491

BOLIVIA.[b]

Clothing, men's	64,624
"Other articles of clothing," except women's clothing, all hats, gloves, knitted articles, laces, trimmings	297,966
Total	362,590

BRAZIL.[b]

Wearing apparel, except hosiery, neckties, laces, etc. (passementerie):	
Cotton	1,143,599
Wool	98,617
Linen	102,211
Silk	43,691
Total	1,388,118

BRITISH GUIANA.[b]

Clothing, ready-made	79,810
Linen, cotton, and woolen manufactures, except haberdashery and headwear	861,120
Total	940,930

BRITISH HONDURAS.[b]

Clothing, except haberdashery and headwear	67,105

CANADA.[c]

"Other clothing not otherwise provided for," except hosiery, underwear, shirts, blouses, shirtwaists, corsets, collars and cuffs, gloves, headwear, handkerchiefs, knitted goods, laces (passementerie):	
Cotton	2,965,342
Wool	2,189,558
Silk	1,102,100
Linen	21,265
Waterproof clothing, various materials	1,684,564
Total	7,962,829

CHILE.[a]

Clothing, men's and boys':	
Cotton	82,312
Wool	208,994
Silk	2,680

CHILE—continued.

Clothing, men's and boys'—Continued.	
Cotton and silk mixed	$1,937
Flax, cut but not made	515
Wool, cut but not made	30,866
Wool and silk mixed, cut but not made	12,968
Cotton, cut out, of tricot	9,783
Clothing, oiled or waterproofed:	
Cotton	22,604
Wool	4,306
Wool, cut but not made	1,638
Wool overalls, mufflers, ponchas	31,317
Total	409,920

COSTA RICA.[b]

Clothing, except hosiery, shirts, collars and cuffs, corsets, gloves, and headwear:	
Cotton	74,923
Wool	15,210
Silk	8,684
Linen	91
Total	98,908

CUBA.[d]

Clothing, except hats and laces, etc. (passementerie):	
Cotton	662,104
Wool	176,083
Silk	204,675
Other fibers	95,284
Total	1,138,146

DUTCH GUIANA.[a]

Ready-made clothes	79,041

ECUADOR.[e]

Clothing:	
Cotton	25,187
Wool	13,317
Silk	6,377
Linen	496
Other fibers	1,866
Clothing, with or without silk lining	7,557
Total	54,800

FALKLAND ISLANDS.[b]

Wearing apparel	52,101

FRENCH GUIANA.[b]

Clothing, ready-made, men's	23,956
Rubber clothing	969
Total	24,925

GRANADA.[b]

Wearing apparel, except haberdashery and headwear	28,610

GUADELOUPE.[b]

Clothing and haberdashery	16,800

GUATEMALA.[b]

Ready-made clothing:	
Cotton	80,595
Woolen	24,854
Silk	62,973
Total	168,422

[a] Calendar year 1913.
[b] Calendar year 1912.
[c] Fiscal year ended Mar. 31, 1914.
[d] Fiscal year ended June 30, 1914.
[e] Calendar year 1911.
[f] Fiscal year ended June, 30, 1915.

HAWAII.[a]

From the United States:	
Cotton wearing apparel	$667,390
Woolen wearing apparel	40,176
From other countries:	
Cotton wearing apparel	20,567
Woolen wearing apparel	3,210
Silk wearing apparel	42,956
All other wearing apparel, except handkerchiefs, headwear, and passementerie	346
Total	774,645

JAMAICA.[b]

Wearing apparel, except haberdashery, headwear, hosiery, and other cotton manufactures	241,240

MARTINIQUE.[b]

Clothing and haberdashery	22,320
Clothing, not specified, except knit goods, corsets, head and neck-wear, handkerchiefs, and passementerie	6,598
Total	28,918

MEXICO.[c]

Ready-made clothing, not specifically mentioned:	
Cotton	203,035
Linen	37,083
Silk	118,737
Silk, mixed with other materials	18,187
Artificial silk	569
Oilcloth	25,029
Wool	170,552
Total	573,192

NEWFOUNDLAND.[b]

Clothing (includes collars and cuffs)	363,608
Oiled clothing	34,347
Total	397,955

NICARAGUA.[d]

Clothing and wearing apparel:	
Cotton	190,660
Wool	63,535
Silk	48,990
Total	303,185

PANAMA.[b]

Ready-made clothing	403,999

PARAGUAY.[c]

Ready-made clothing	135,313

PERU.[d]

Clothing, various, except hosiery, underwear, shirts, collars, hats, shawls, lace, handkerchiefs	84,682

PHILIPPINE ISLANDS.[c]

From the United States:	
Coats, pants, and vests of cotton	47,997
Other cotton clothing and men's wearing apparel, except shirts, collars and cuffs, hosiery, underwear.	71,901

PHILIPPINE ISLANDS—continued.

From the United States—Continued.	
Woolen clothing and other wearing apparel	$149,230
Silk clothing and other wearing apparel, except knit goods	41,134
From other countries:	
Coats, pants, and vests of cotton	615
Other clothing and men's wearing apparel, except shirts, collars and cuffs, hosiery, underwear	54,052
Woolen clothing and other wearing apparel	19,071
Silk clothing and wearing apparel, except knit goods	78,584
Total	462,584

PORTO RICO.[f]

From the United States:	
Cotton wearing apparel, except knit goods	634,195
Wool wearing apparel	67,356
Silk, manufactures of	229,326
From other countries:	
Cotton wearing apparel, including hosiery and knit goods	28,352
Wool wearing apparel	14,692
Silk wearing apparel	1,025
Total	974,946

ST. VINCENT.[b]

Wearing apparel, except haberdashery and headwear	10,390

ST. PIERRE AND MIQUELON.[b]

Clothing and haberdashery	19,641
Clothing, not specified, except knit goods, underwear, headwear, corsets, passementerie	1,068
Total	20,709

TRINIDAD AND TOBAGO.[b]

Wearing apparel, except knit goods, hosiery, gloves, headwear, haberdashery	234,040

TURKS AND CAICOS ISLANDS.[b]

Wearing apparel, except haberdashery and headwear	1,280

URUGUAY.[c]

Clothing, ready-made, men's and boys':	
Cotton	21,414
Wool and principally wool	26,647
Linen	150
Total	48,211

VENEZUELA.[d]

Ready-made clothing	3,118
Wearing apparel, except underwear, collars and cuffs, hosiery, headwear, shawls, corsets, suspenders, and garters.	1,804
Total	4,922

[a] Fiscal year ended June 30, 1915.
[b] Calendar year 1912.
[c] Calendar year 1914.
[d] Calendar year 1913.
[e] Calendar year 1911.
[f] Fiscal year ended June 30, 1915.

SUGGESTIONS FOR INCREASING FOREIGN TRADE.

No serious organized efforts have hitherto been made by American manufacturers of men's clothing to place their products in foreign markets, and with few exceptions such business as they have obtained has come largely through export houses. It is claimed by some of the manufacturers that export houses frequently do not give active attention to the selling of American clothing abroad, because other lines, such as automobiles, hardware, and machinery, offer better returns and do not require the effort and technical knowledge that are necessary in attempting to introduce clothing.

There is a rather widespread ignorance among manufacturers as to the requirements of the foreign markets and the proper methods to be adopted in building up an export trade. An active campaign of inquiry and study must be inaugurated before definite results can be expected. The most effective plan would be for the manufacturers, individually or collectively, to send their own representatives into the foreign fields to study the conditions and the tastes of the people in the matter of ready-made clothing, show their samples, and establish their own agents in the principal countries, who could look after the business when their representatives had returned from the field.

Manufacturers who are unable or unwilling to adopt this policy should avail themselves of the facilities which the Bureau of Foreign and Domestic Commerce at Washington and the American consular service provide for assisting them in securing export trade. In the "Trade Opportunities" published in the Commerce Reports, issued daily by the Bureau, there are frequently printed inquiries from abroad for the names of American manufacturers and exporters of clothing, and if these opportunities are actively followed up connections may be made with importers abroad which may result in good sales. American consuls can furnish specific information in regard to the possibilities for trade in certain markets. They can also procure samples showing the particular kinds of goods which are in demand.

Manufacturers who seriously undertake the work of selling their products abroad should bear in mind the suggestions which always apply in the development of export trade, namely, to write their letters and prepare catalogues in a language which the foreigner understands, to quote prices in a currency with which he is familiar, to furnish c. i. f. (cost, insurance, and freight) quotations as far as possible, to pack goods properly, to fill orders promptly and carefully, to extend a reasonable amount of credit where the standing of the importer justifies it, and to keep in constant touch with the market through representatives or by correspondence. An active campaign which incorporates these suggestions, backed by a thorough study of the foreign markets and their requirements, will undoubtedly result in a substantial increase in exports of men's clothing.

A monograph on South America as an Export Field[a] is intended to give manufacturers information as to the character, extent, resources, and trade of South American countries which will assist them to determine the most favorable markets for their goods. This monograph, which was published in 1914, contains 216 pages, and

[a] Special Agents Series No. 81.

may be procured from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 25 cents per copy.

The Bureau of Foreign and Domestic Commerce has recently issued (as Tariff Series No. 32) a volume setting forth the customs duties on textiles in all the South American countries. The publication covers everything comprehended in the textile industries from the raw fiber, thread, yarn, and fabric, through all the ramifications of made-up articles—ready-made clothing for men, women, and children, knit goods of all kinds, embroidery, trimmings and other fancy articles, carpets and rugs, and other manufactured articles of which textile materials constitute the whole or important parts.

The original customs tariffs of all foreign countries are on file in the division of foreign tariffs of the Bureau of Foreign and Domestic Commerce, which, in response to specific inquiries, will furnish information concerning the duties on any particular product in any country in which the inquirer may be immediately interested.

REPORTS FROM AMERICAN CONSULS.

Commerce Reports (formerly Daily Consular and Trade Reports), issued daily by the Bureau of Foreign and Domestic Commerce,[a] frequently contain information in regard to the manufacture of men's clothing in foreign countries, statistics regarding the imports of such goods, statements regarding the kind of goods for which there is a demand, and suggestions in regard to how trade in such countries can be established or extended by American manufacturers. Reports that have been published since the war in Europe began indicate that in some of the belligerent countries there is now a better opportunity for the extension of American trade than formerly existed.

BRITISH COLUMBIA.

AMERICAN CLOTHING ADVERTISED.

[Consul General David F. Wilbur, Vancouver, Daily Consular and Trade Reports, Aug. 7, 1913.]

There is an increasing sale for eastern Canadian clothing. In some cases these goods are purchased from branch houses of American firms located in Canada. Some of the firms in the United States are represented here, but are handicapped by the 35 per cent tariff rate. From what can be learned, American clothing is used a great deal as an advertisement to assist in selling Canadian-made clothing. Little English-made clothing is sold except to Japanese, Chinese, Hindus, and other foreigners.

BRITISH HONDURAS.

AVOID METAL ON TROPICAL CLOTHING.

[Special Agent Garrard Harris, Belize, Daily Consular and Trade Reports, Nov. 12, 1914.]

Manufacturers of light-weight garments such as duck, linen, the "Palm Beach," and "Panama cloth" would do well to exercise care in seeing that clothing designed for use in the Tropics does not have any metal about it. Considerable complaint is heard that the small buckles on the sides of the trousers, and the tinned or japanned iron catch in the front of trousers waistbands rust soon from the constant washing such garments necessarily undergo. This discolors the fabric and makes it unsightly. Especially is this the case in places near the sea, as the salt breeze corrodes the metal very quickly. Men in the Tropics have been heard to declare they would prefer to buy the ready-made garments instead of having clothes made by tailors but for the fact that metal was used. Some of these clothes have metal buttons, and these rust the same as other metal pieces.

[a] For sale by the Superintendent of Documents, Washington, D. C., at $2.50 per year.

The use of buttons of bone, porcelain, or similar material is desirable and for buckles it would seem that a celluloid or bone device could be arranged. It is believed that the absence of any metal on the garments would assist considerably in their sale.

CHINA.

INCREASING USE OF FOREIGN-STYLE CLOTHING.

[Consul Edwin L. Neville, Antung, Daily Consular and Trade Reports, May 26, 1914.]

The use of European-style clothes among the Chinese is unquestionably growing. All Chinese officials wear frock coats and evening dress on formal occasions. It is also customary for merchants and other business men to keep foreign clothes in reserve. It is now possible to find tailors in any city of importance anywhere in China, I am told, and the local Chinese tailors are authority for the statement that their business has doubled in the past two years. Certainly the number of tailors has greatly increased of late years.

CLOTHES MADE AFTER FOREIGN FASHIONS.

[Consul General Julean H. Arnold, Hankow, Commerce Reports, Nov. 21, 1915.]

The considerable decrease in imports of foreign-made clothes from $44,814 in 1912 to $29,772 in 1913 was due to the fact that the Chinese have learned how to make clothes after the foreign fashion, and numerous Chinese tailor shops are doing a thriving business. Practically all the cheaper grades of clothes were imported from Japan. Of the better grades Great Britain furnishes a large quantity, which is sold in the retail stores of the foreign concessions.

COLOMBIA.

AMERICAN CLOTHING READILY SOLD.

[Consul Isaac A. Manning, Barranquilla, Commerce Reports, May 25, 1915.]

The use of ready-made clothing for men and children in Colombia is increasing rapidly since some of the coast cities began importing from the United States. Formerly ready-made clothing was brought principally from Austria and Italy, and the writer was informed that American clothing cost too much and could not be sold.

The first lot of American clothing brought into Barranquilla, in light cassimeres and suitings, was found to have a style and finish that made it sell, and last year one of the most important houses brought in a trial-order stock of men's wear in Palm Beach cloth, in two-piece suits. These sold here readily at retail at $10 per suit, and the order has been frequently repeated. Since all sizes were not to be had, however, the same house imported the cloth in bolt, selling it at $2 per yard for double width. A two-piece suit requiring 3½ yards, made to order in Barranquilla, equal to the imported ready-made suit, cost $4 to make, or a total of $11. Thus there is a fair difference in favor of the ready-made suit from the United States.

The trade in Barranquilla holds to the idea that it is impossible to sell imported suits here at a profit because of the high duties, and no traveler carrying samples of ready-made clothing from the United States has appeared to attempt to change this idea. Lightweight suits in washable flannels, cassimeres, cassinets, alpacas, or similar materials, in either two or three piece suits, can be sold here. As long as the retail price can be kept between $10 and $25, if the colors and patterns are attractive and the suits are made on good forms, the goods can be sold.

The duties on ready-made clothing, which are payable in gold on gross weight, including all packing, are as follows: On cotton suits (coats, trousers, or vests), $1.30 per kilo ($0.59 per pound); on linen suits, $1.50 per kilo ($0.68 per pound); on linen suits with silk stripes, checks, etc., where the silk surface does not exceed 25 per cent, $3.20 per kilo ($1.45 per pound); on clothing for men, women, and children, of material with weft of wool, or wool and any other fiber except silk, on a warp of cotton, hemp, or similar fiber, without mixture of wool or silk, with linings or trimmings other than wool or silk, $1.60 per kilo ($0.73 per pound); on clothing of other wool or wool and cotton material, with or without light stripes, checks, or threads of silk, with linings or trimmings not of silk, lace, or embroidery, $2 per kilo ($0.91 per pound); on clothing of woolen fabrics not specified, $3 per kilo ($1.36 per pound).

It is suggested that clothing should be shipped in bales wrapped in waterproofed burlap; and if carton boxes are shipped for display they should be shipped knocked down, separately from the clothing. This last suggestion is offered in the case of almost any article paying high rates of duties (such as underwear, cotton shirts, and neckwear), as the duty on such boxes, even though they carry printed labels, is only $0.17 per kilo ($0.08 per pound).

Local tailors charge $9 to $10 for making a cassimere business suit, without furnishing the cloth, $12 to $15 for a frock suit, and $20 for a dress suit. The styles in demand correspond to up-to-date styles in the United States, and old-fashioned stock will have no sale here. The best selling seasons are November to January (inclusive) and the "before Easter" period.

COSTA RICA.

DEMAND FOR CHEAP GRADES.

[Consul Chester Donaldson, Port Limon, Daily Consular and Trade Reports, Nov. 13, 1914.]

There is no merchant in Port Limon or this district who carries a stock of ready-made clothing other than the ordinary cotton working clothes, overalls, shirts, and various grades of underclothing. The population of this district is largely made up of negro and peon laborers, and a cheap cotton shirt and a pair of overalls suffice for their needs. The climate is so warm and moist that any suit of fine woolen material not in daily use mildews and soon becomes worthless; consequently no such goods are kept in stock.

In the consular district of San Jose, which includes all the larger cities of Costa Rica and is at such an elevation that the climate is delightful and cool all the year through, there are several large ready-made clothing houses. The principal one of these imports and keeps in stock a large variety of fine ready-made clothing, which heretofore has been purchased from France.

LONG-TIME CREDIT DEMANDED.

[Consul Chester Donaldson, Port Limon, Commerce Reports, May 29, 1915.]

Neither women's nor men's ready-made clothing has become popular in this district. Local tailors and dressmakers control practically all such trade, making the clothes to order. Underclothes, hats, corsets, hosiery, etc., are generally imported. It is absolutely necessary to grant credits in order to do business in Central America, where European houses have been in the habit of allowing four to six months and sometimes nine months or even one year to well-known customers.

CUBA.

IMPORTS OF READY-MADE CLOTHING INCREASING.

[Consular Agent Dean R. Wood, Neuvitas, Daily Consular and Trade Reports, Aug. 28, 1914.]

During the last few years a prosperous trade has been built up in Cuba in American ready-made clothing, a number of firms in the United States participating therein. Cuba's foreign trade is growing, and the imports of such clothing are especially increasing. Other American manufacturers might share in this market if they send attractive goods and if shipping documents are properly made out.

Chambray, khaki, and drill shirts, denim overalls, khaki and drill trousers are being imported into Cuba in large quantities, coming almost entirely from the United States. However, the trade is not confined to workingmen's clothing. Considerable quantities of the finer grades of cotton goods, and clothing made of wool and silk, or mixtures thereof with cotton, also ready-made clothing for women, are imported. Effort has been made to manufacture in Cuba grades of cotton clothing, but without much success.

In shipping ready-made clothing to Cuba the gross and net weight of the packages should be given, as well as the net weight of each article or class of goods. The Cuban duty on ready-made clothing is based on the duty on the component material, which is determined by the thread count. Surtaxes are provided for admixtures of wool, silk, etc., as well as for coloring or dyeing.

Ready-made clothing generally bears on every garment a reference mark or number. The invoice should contain separately the net weight of garments of each mark or number. This is necessary because certain fabrics that may appear to be in the same class actually have more or fewer threads than goods of similar appearance in the customhouse, as the case may be.

If ready-made clothing is packed in cardboard boxes, as is often the case, the net weight of these boxes should be given separately from the net weight of the goods, or the net weight of the goods only should be given. Thus considerable savings in duties may result to the buyer of the goods.

If goods contain a mixture of other material the fact should be stated in the invoice, as well as the percentage of other material. If mixture is more than one-fifth of the number of cotton threads the goods are considered as wool, silk, or other material, as the case may be. Goods composed entirely of wool or silk are charged on the ad valorem basis and not by the number of threads. On linen goods the duty varies according to the number of threads, as on cotton goods.

The correct making out of invoices for shipment to Cuba is not difficult. Customers should be asked from time to time if goods have been received in good condition with everything satisfactory, and if they have any suggestions to offer.

ENGLAND.

LITTLE CLOTHING EXPORTED TO THE UNITED STATES.

[Consul Homer M. Byington, Leeds, Commerce Reports, July 26, 1915.]

It is hardly likely to be disputed that Leeds and London are the two foremost English cities in the manufacture of ready-made clothing, and it estimated that in Leeds between 40,000 and 50,000 workers (about 50 per cent of whom are Russian Poland Jews) are employed in this trade, so that local prosperity depends to a certain extent upon a profitable year's business. The year 1914 opened badly, with slack orders until March, when a short-lived recovery took place until June, only to settle down to a poor outlook for the fall and winter seasons; but with the outbreak of war in August came the necessity of clothing the increased army, and soon nearly all local manufacturers turned their attention to khaki uniforms. The year ended with extra hands and extra time being general, and so continued after the beginning of the present year. Although the handling of khaki and making of uniforms was new to most manufacturers and workers, the Government contracts were worked at such a pace as to keep well within sight of the number of enlistments ready-made clothing was declared for export to the United States in 1914 to the value of $21,995, but in 1913 the shipments were not of a sufficient value to justify a separate classification.

GERMANY.

MARKET FOR STANDARD STYLES.

[Consul Charles A. Holder, Cologne, Daily Consular and Trade Reports, May 26, 1914.]

In this district, unlike the United States, ready-made clothing, though bought in large quantities by the laboring classes, is almost never worn by well-to-do men, and is worn by only a very small percentage of those in moderate circumstances.

Men who can afford good clothes naturally prefer to have them made to order, but many with limited means patronize custom tailors solely because the latter are accustomed to selling on credit, while clothing stores never do. As a consequence many made-to-order suits are seen here where the cloth, fit, and general finish are greatly inferior to the average suit made by American manufacturers of ready-to-wear clothing, although they have cost the wearer considerably more money. The method in vogue here among custom tailors, of making suits upon the receipt of 20 or 25 marks ($4.76 or $5.95), with the balance payable in monthly installments, is one reason why sales of the better grades of ready-made clothing are not larger, but a greater reason is to be found in the comparatively poor quality and the limited variety of cloths and patterns to be found in the ready-made suits offered for sale.

German clothing manufacturers have not yet realized, apparently, the possibilities offered by this trade, and are about in the position that obtained among American clothing manufacturers 20 or 25 years ago. This market, therefore, can be greatly developed, and under certain conditions offers an excellent opportunity for the sale of men's ready-to-wear American clothing. For boys' clothing there is also a market, as very little of it is custom-made.

All the ready-made clothing sold in this district at present is made in Germany, except overcoats and ulsters, raincoats, automobile coats, and other specialties, which are frequently of English manufacture. All of the largest clothing stores in Cologne have factories in Stettin, Berlin, Breslau, and other northern cities, as wages in this district are too high to render the manufacture of clothing profitable. One or two of these firms employ as many as 30 cutters and several hundred tailors, not only supplying their local stores, but others also, which they maintain in Duisburg, Dusseldorf, and other towns where there are large numbers of miners or factory employees. Smaller dealers, though nearly all advertise that they have their own factories, obtain their supplies from wholesale manufacturers in the cities mentioned.

As far as could be ascertained, only one American manufacturer has ever succeeded in introducing clothing in this district, and his line did not meet with much success, as the clothes, though far superior to what is usually sold in quality, finish, and cut, were considered to be somewhat extreme in style. The amount of clothing sold in Cologne is large, as this city supplies farmers and workmen who are employed in various industries within a wide radius.

The grade in greatest demand is inexpensive, and nearly all the cloth used is of German manufacture, coming chiefly from Aix-la-Chapelle. A few suits of better grade are sold each season, and for these English cloths are used. The latter are also used for fancy waistcoats, ulsters, and for trousers which are to be used with frock coats for ceremonial occasions. Linings, like the cloths used, are usually of German manufacture. though a small amount is imported from England for the highest-grade suits. Buttons are all of German manufacture.

Retailers who have no factories of their own depend upon wholesale manufacturers, and obtain their supplies through traveling salesmen, who call upon them four or five times a year. Some dealers, however, go to the factories to select their stocks or to contract with manufacturers for their season's supply. The usual terms of sale are 30 days net, but longer credits are occasionally given, for which interest is charged.

The smaller custom tailors make suits to order for from 60 to 80 marks ($14.28 to $19.04), using German cloth, while better-class tailors charge from 80 to 125 marks ($19.04 to $29.75), depending upon whether German or English cloth is used. When cloth is taken to custom tailors to be made up, the latter charge from 30 to 40 marks ($7.14 to $9.52) for making the suit and for supplying the lining, buttons, etc. Prices of ready-to-wear clothing differ according to quality, but the following are average prices. For sack suits consisting of coat, vest, and trousers:

First quality, 60 to 85 marks ($14.28 to $20.23), usually made of English cloth.

Second quality, 50 to 70 marks ($11.90 to $16.66), usually made of German cloth.

Third quality, 16 to 50 marks ($3.81 to $11.90), always made of German cloth.

Boys' suits of the first quality sell for 25 to 40 marks ($5.95 to $9.52) and of the second quality for 7 to 25 marks ($1.67 to $5.95).

Men's overcoats of the best quality sell for 70 to 100 marks ($16.66 to $23.80) and of the second quality from 50 to 70 marks ($11.90 to $16.66). Light-weight overcoats for spring and autumn sell for from 30 to 80 marks ($7.14 to $19.04). Boys' coats cost from 30 to 45 marks ($7.14 to $10.71).

Ready-made evening clothes are always made of German cloth and sell for 45 to 85 marks ($10.71 to $20.23).

Ulsters, usually imported from England, sell for 70 to 100 marks ($16.66 to $23.80); automobile coats with fur trimmings for 100 to 150 marks ($23.80 $35.70); the same for chauffeurs for about 70 marks ($16.66).

American clothing made in standard styles, which do not run to extremes in yearly changes, should find a market here. It can best be introduced through the establishment of a general agency in Berlin, where the clothing could be carefully examined and where suitable sizes, cloths, and styles could be selected personally by the retailer. If this method is impossible traveling salesmen with sample suits should call upon dealers. It seems certain that if the latter could be shown the high quality of American suits, and be assured that their standard of style would be accurately followed by the manufacturer, they could be induced to give orders which eventually would be of large proportions. To send catalogues printed in English, which few dealers understand, is of no use. German must be used, and quotations should be for goods delivered c. i. f. at a German port, preferably duty paid. Even with these conditions, however, it can not be too strongly urged that orders can be secured only by showing actual suits, and not through samples of cloth and cuts or pictures of the clothing offered.

The chief objection to American clothing at present, dealers state, is the loose fit of the trousers at the waist and the wide-cut thighs. This could readily be changed to conform to the German standard. The fact that German styles do not change, so that orders could be made up perhaps a year in advance, during the slack American seasons, when workmen would ordinarily be laid off or worked on half time, should prove of great value to American manufacturers.

The clothing that would sell best would be sack suits in solid colors, such as blue, gray, brown, and green, of medium weight, that could be sold at retail for about 70 marks ($16.66). Standard black cutaways and dress suits are also always in demand. As American clothing became better known a demand for higher grades would naturally follow.

GUATEMALA.

ALL IMPORTED CLOTHING FROM THE UNITED STATES.

[Special Agent B. Joachim, Commerce Reports, Feb. 25, 1915.]

Ready-made clothing is imported into Guatemala only to a limited extent. That which does come in is of United States make and is of the medium grade. Suits that sell in the United States for $10 or $12 are occasionally marketed, the price in Guatemala running about $18 in United States currency. No ready-made clothing is imported from any other country.

The sale of ready-made clothing for men and boys is not common in Guatemala, and most clothing worn is purchased from tailors, who make up the goods to order in the same way as the better class of goods is sold in the United States. The material for these suits comes in very large part from Europe, partly because the manufacturers of England, Germany, Italy, France, and the other countries have been engaged in the trade for many years, know the tastes of the people, and are willing to supply the trade with the particular styles and patterns desired, and to extend long credits. American manufacturers of cloth have in general so far failed to make any extensive study of the market. The principal reasons why they have not secured the comparatively large share of the trade which they might have had are that they have not learned what the people want in the way of patterns and styles, and that they are unwilling to make up the separate patterns in the small lots desired by the Guatemalan buyers or meet their wishes in regard to credits. The people of Guatemala are as much or more attached to the distinctive styles prevailing there as the people in the United States, and just as Americans would not care to purchase conspicuously colored, striped, or checked clothing because they have not been used to seeing or wearing these goods, so the Guatemalans insist on having the particular styles prevailing in their country. The European manufacturers are perfectly familiar with these preferences and take care to observe them in attempting to make sales. There seems to be no reason why Americans should not have three-fourths or more of the trade if they will cater to the wants of the people and if they can profitably manufacture the different styles in the small-size lots required.

The clothing for men is all made from this imported cloth by hand or with the use of sewing machines, no power machinery being used. As noted, it is made up to order, with the exception of the cheapest class of goods worn by the Indians. These are made in large lots and sold as ready-made clothing is sold in the United States, the price being very low. The usual clothing worn by the Indian men consists of a shirt (usually gay colored), a pair of trousers reaching to the ankles, and a short jacket, the whole costing probably less than $1 United States currency. When the weather is cool the Indian wears a cheap cotton blanket, and these blankets are consequently sold in great quantities. They come almost altogether from England and Germany, but could easily be supplied from the United States. Gay colors and patterns are usually preferred by the Indians, who are very conservative and will not buy goods of a color to which they are not accustomed. Some cheap blankets are manufactured in Guatemala, and these retail at 35 to 40 cents apiece or even less. The imported blankets purchased by the Indians will average perhaps 55 or 60 cents retail, and this price represents a profit of 150 to 200 per cent. [About 60 per cent of the 2,000,000 people of Guatemala are Indians and most of the rest are of mixed blood.]

The clothing worn by clerks, small tradesmen, etc., is of the kind that would cost $10 to $20 a suit in the United States. A clerk will probably have one good suit at $20 or more and one or two others of lower price. Merchants and business men also wear a comparatively inexpensive suit for daily use, with better clothes for evening and holiday purposes. The workmanship on these clothes is usually good so far as wearing qualities are concerned, but the style and appearance of even the better grades of suits are generally inferior to the style and appearance of United States clothing. It is thought that under normal conditions a good sale in American ready-made clothing might be built up, but it would be necessary first of all to send down the right patterns, and as the people are not accustomed to buying the ready-made suits a certain amount of intelligent missionary work would also doubtless be required. The few lots of American ready-made clothing that have heretofore come in have been of the $10 to $20 grade, and these have filtered through only in a haphazard manner. One merchant, for instance, has a stock of goods on hand which his representative picked up at a bargain in New York and shipped down to him. He sold the better suits (as many as 80 or 90) without great difficulty, but the others were hard to dispose of and were left on his hands. It is probable that many of these might be marketed if slightly altered. It is details such as this that the American exporter would have to look after if he desired to push his goods. The fact that these suits were sold and that others are occasionally marketed is sufficient proof that a potential demand exists and needs only intelligent cultivation to result in a steady trade.

The clothing worn by the larger merchants and other business men, lawyers, doctors, government officials, etc., is of a substantial grade, prices running from $30 to $40 or more. These suitings are largely woolens, and the total amount used in a year for this purpose would probably amount to a value of $100,000. The woolens come in large part from England and Germany, though other European countries also share to a greater or less degree in the trade. The United States sells few or no goods of this kind, for the single reason that the United States merchants have not cared to cater to the trade. There seems no doubt that a substantial trade in these goods could be built up by the United States if proper care were used in selecting patterns and in looking after similar details. For everyday business purposes the sack suit common in the United States is now generally worn, though a few years ago a more formal dress was common. For official calls on officers of the government, day weddings, and similar formal social affairs the cutaway suit is common, though sometimes the Prince Albert is worn. The dress suit is generally worn at formal evening functions as in the United States, and Tuxedos to a certain extent in the clubs, etc. There is a certain market for this class of goods, but it is necessarily small. There is a possibility, however, that ready-made dress suits might be sold, and if an attempt is made to establish the sale of ready-made garments in the market, it would probably be as well to include some suits of this kind in the stock sent down.

The climate of Guatemala in most settled sections is not tropical, and this applies especially to Guatemala City and the surrounding country. Thin clothing is therefore not particularly in demand. The evenings are rather cool, as are also the days, as a rule, except for the hours between 10 a. m. and 2.30 or 3 p. m. Suits are nearly always full lined, the lining material being of all grades, from the cheapest to the very good. These linings come from Europe, as the merchants prefer to buy this material from the same sources as the other cloth for suits. American linings can be sold and a trade in them will probably spring up as soon as American woolens and other suitings begin to be sold. The American practice of going without a waistcoat in the hot summer weather is not followed in Guatemala, waistcoats being invariably worn under all circumstances. Fancy waistcoats are seen, and occasionally white waistcoats, but the latter are not common.

For two months or so of the rainy season overcoats are occasionally worn in the evenings, and a certain demand for them could be cultivated. These are of medium weight, and are of no special design. Those now worn are made generally in the country itself, but there is apparently no reason, except perhaps the duty, why they could not be imported. In the seaports and other towns where tropical conditions prevail, some white suitings, such as duck, white serge, and flannels, are worn, but the population of these places is small and the number of people among whom a demand for these goods might be created is therefore limited. Of the suitings mentioned, the duck, obtained usually from England, is most in evidence. Full suits of this material are often worn, though the white serge trousers are usually worn with coats of a darker material. The "Palm Beach" suits worn by some tourists and traveling men last summer were much admired, and a large number could have been sold had they been on hand. It is quite likely that in 1915 these suits will become very popular, and it would be of value to American manufacturers to investigate the market personally.

The rainy season lasts some four months in Guatemala, and there is consequently a considerable demand for mackintoshes and cravenettes. Up to a few years ago these were almost universally the old-style black rubber mackintoshes, with pointed hoods, and came from Germany and England. These still largely prevail, but are being slowly displaced by the American waterproof cravenette, which is well liked. It is likely that in a few years these will be worn entirely by those able to purchase the better grade of goods, though there will continue to be a market for the less expensive all-rubber coats. Prices at present range as high as $25, but seldom go above that. This is a field that deserves attention, and American manufacturers will find a continuous demand for goods once introduced and found to be satisfactory.

Workingmen's overalls and jackets such as are used generally in the United States to protect the clothing are practically unknown in Guatemala. The clothing worn by the peons is no better than the usual grade of overalls, and there would be no particular reason for protecting it. The price of our overalls is also too high to permit much of a sale in Central America. The buttons used on clothing manufactured in the country have come in most part from Austria and Germany, and these supplies

are cut off for the present. There was a considerable stock on hand, however, when the war broke out, and present conditions are not likely to cause an immediate shortage.

INDIA.

INCREASED USE OF WATERPROOF CLOTHING.

[Consul Henry D. Baker, Bombay, Daily Consular and Trade Reports, Oct. 21, 1914.]

There is a fair trade in India in waterproof clothing, the imports for 1913–14 amounting to $80,776, as against $57,880 for the preceding year. Waterproof clothing, like umbrellas, meets with an urgent and increasing demand during India's monsoon seasons. Waterproof coats and cloaks sell at $1.50 up to $15 apiece, according to size and quality. Usually dealers order from the manufacturers about a year before the date of delivery, as generally the more time allowed manufacturers for execution of the orders the cheaper they can be obtained. Orders are usually sent in for the ensuing year shortly after the monsoon season has started. At this time dealers are in a position to know whether or not they will have much unsold stock left over, the demand, of course, depending considerably upon the intensity of the monsoon and also upon the general trade conditions.

The big demand may be expected during the early days of the monsoon, during the latter part of June or the early part of July. The newspapers of India at this time are especially full of advertisements of all kinds of waterproof apparel as well as umbrellas. One leading department store of Bombay advertised the importation of 3,500 raincoats for the past monsoon season. England supplies practically all waterproof apparel used in India, and resident Europeans are the chief purchasers. The cheapest class of goods they purchase for their servants. Among most coolies and agricultural laborers who are obliged to work outdoors in rainy weather, the chief protection from the rain consists of coarse woolen blankets that are folded to make a kind of hood over their heads and a cloak over their bodies. While such blankets are not impervious to water, they lessen the disagreeable effects of the heavy rains.

MEXICO.

AMERICAN MANUFACTURERS NEGLECTING A PROMISING MARKET.

[Vice Consul A. Gordon Brown, Mazatlan, Daily Consular and Trade Reports, Aug. 25, 1914.]

In the large Mexican cities there is considerable sale of American ready-made clothing, and it is surprising that no merchant in Mazatlan, a city of 20,000, handles this line.

A demand would develop for such garments if they were introduced after the people became convinced that they could save money by purchasing them. It is difficult to get any kind of a presentable suit here for less than $25, United States currency. Tailor-made clothing is worn by everybody except the poorer people, who use ready-made overalls to a great extent.

Clothing, such as can be bought in the United States for $15 and at closing-out sales as low as $10 a suit, is unknown in the Mazatlan district. If suits were offered here at retail at $15 to $25 in competition with tailor-made garments they would find a good market. The well-to-do Mexicans wear the latest styles and are well dressed. American ready-made shirts, hats, neckwear, and hoisery, etc., are already being sold here.

The American manufacturer who contemplates offering clothing to this market is favored in that, on account of the climate, the garments worn are of very light weight. As the customs duty is based on weight, it is claimed that ready-made suits of good texture could be imported here advantageously.

Two Mazatlan tailor-made suits may be taken for illustration: A summer two-piece suit costing $25 was found to weight 1.3 kilos (2.86 pounds). The customs duty on a similar foreign ready-made suit, if made of cotton, would be $1.16; of wool, $2.73. A winter suit costing $30 was found to weigh 2.2 kilos (4.85 pounds). The customs duty on a similar foreign ready-made suit, if made of cotton, would be $1.96; of wool, $4.63. The above rates have been calculated on the basis of the value of the Mexican peso during the month of July and include a surtax of 12 per cent of the duty.

The freight rate by water on merchandise from San Francisco, Cal., to Mazatlan, per 2,000 pounds or 40 cubic feet space, is $7.

This information is presented with the hope that there will be peace on the Mexican west coast shortly. At present duties have been increased approximately 67 per cent and business is paralyzed.

On account of the climate in this and the surrounding country, overalls as suits are not as much used as in other localities, although there is some trade in overall pants. To the south in the more tropical climes a light cotton cloth is used to make the wearing apparel of the classes who would wear the overalls in the United States. This is always a white cloth and very thin, resembling pajamas.

There are factories at Villa Union, Sinaloa, and at Los Angeles, Sonora, which manufacture cloth for the overalls. The merchants buy the cloth and employ the Chinese here to make them up, the charge being $2.50 to $3.50 Mexican currency for making a dozen pair each of pants and shirts. About three dozen pair of pants are sold to one dozen shirts, due to the climate. A suit of overalls sells here at $3 or $4 United States currency, according to quality. One side is dyed a dark blue and the other side a light blue, and the suits are made up on the light-blue side. These make good suits and are used to some extent by those of moderate means in Lower California.

The cotton for this work is obtained from Acapulco, Acaponeta, Lower California, Sonora, Sinaloa, and Torreon.

Firms in the United States which are considering the markets in this part of Mexico must meet the high Mexican duty on this class of wearing apparel, which is $2.75 Mexican currency per kilo, equivalent, at the present value of the Mexican peso, to about $0.40 per pound.

There is an excellent market in this part of Mexico if the American manufacturer offers overalls in competition with the local output. Thousands of suits could be sold. In the State of Sonora there are factories which manufacture overalls, and they are doing very well.

In all the mining camps throughout this district overalls are used to a great extent.

NORWAY.

OPPORTUNITY FOR SALE OF AMERICAN CLOTHING.

[Consul General Charles A. Holder, Christiania, Daily Consular and Trade Reports, Sept. 26, 1913.]

For American ready-made suits that sell at retail for $15 to $20, Christiania offers a splendid opportunity. Most of the suits now on the market are poorly cut, have little style or shape, and are not warranted to be wool or not to shrink, to keep their color, or to wear well. Nothing approaching the high-grade American ready-made clothing can be found here, and these are even superior to the suits made by custom tailors in style, finish, and general appearance.

While Norwegian clothing dealers know little about American clothing (though they state that American tailors are considered superior to all others), there are enough Norwegian-Americans or Norwegians who have traveled in America to form the nucleus of a demand that would quickly spread if American clothing could once be introduced. American manufacturers who send salesmen to England would find it well worth while to include Christiania in their visits, or if sample suits were sent to a local agent it is possible that this would suffice.

It would seem that the best method of introducing these articles into Christiania would be through the medium of a commission agent who would be constantly in touch with the trade. The import duty on such goods can not be stated until a sample has been submitted to the customs authorities here for decision. Correspondence may be in English or Norwegian, but all advertising matter should be in Norwegian; prices should be quoted f. o. b. steamer at seaport. Direct lines run from Boston, New York, Philadelphia, Newport News, and Gulf ports to Norway regularly and frequently.

NOVA SCOTIA.

CLOTHING TRADE LITTLE AFFECTED BY WAR.

[Consul General Evan E. Young, Halifax, Daily Consular and Trade Reports, Oct. 5, 1914.]

The trade in ready-made clothing and haberdashery will apparently be little affected, in so far as concerns importations, by the European conflict. Except in the cheaper grades of ready-made clothing, which have heretofore been obtained from Germany and Belgium, the bulk of the ready-made clothing imported into this consular district is purchased in England, and shipments continue to be received from at source.

SCOTLAND.

AMERICAN STYLES POPULAR.

[Consul Rufus Fleming, Edinburgh, Daily Consular and Trade Reports, Oct. 15, 1914.]

It is especially noteworthy that prominent woolen cloth concerns which have never before considered the "ready-made" trade are entertaining a suggestion that a syndicate be formed to undertake this branch of manufacture. Some small firms have engaged in the production of clothing with much success. Orders from the British Government and prospective orders from France have induced the larger mill owners to think seriously of the tailoring branch of the business in connection with cloth manufacture, thus carrying on the trade completely from the wool to the wearer. It is claimed that suits can be produced to sell at $11 retail. It is said that a good 18-ounce cheviot cloth can be made, all wool, at $1 a yard when orders are in bulk. The average cost at the factory of making a suit may be taken as $2.45. This leaves about $5.05 for marketing.

There is a probability that the "ready-made" trade will develop rapidly under the impetus which Government orders have given and that this branch of manufacture will become an important feature of the Scotch woolen industry. This opinion is strengthened not a little by the fact that for several years the sales of ready-to-wear suits have been steadily increasing. A fair proportion of men's suits sold in this market are now made in America of Scotch cloth. The style, finish, fine appearance, and wearing quality of the clothing have popularized ready-made articles, even breaking down the prejudice of many men who have heretofore looked at nothing not made to measure. As new conditions are requiring the most careful economy, the time seems auspicious for the development of the wholesale tailoring industry.

SOUTH AFRICA.

MARKET FOR OLD-STYLE CLOTHING.

[Consul Edwin N. Gunsaulus, Johannesburg, Daily Consular and Trade Reports, Aug. 6, 1914.]

Throughout this consular district, particularly in the vicinity of the mines, there is a very brisk trade in old-style American clothing, which will increase to a marked degree, provided exporters strictly comply with the methods of packing and export articles corresponding to samples.

For the most part, local agents obtain their requirements in shipments of 10,000 to 16,000 garments per month, and dispose of them to the wholesale houses, which in turn distribute them to their smaller customers. The smaller firms are mostly established in close proximity to the mines, and dispose of these goods to natives working in and around the mines and works of every description. These natives are mostly of a burly type and the sizes in demand are 4, 5, 6, and 7, with a very small percentage of size 3, packed in bales of 200 assorted sizes, each bale containing 50 suits size 4, 75 suits size 5, 50 suits size 6, and 25 suits size 7. The reason for this method of packing is to allow merchants to dispose of their supplies in bales, without previously having to sort them out. In this respect merchants have hitherto experienced considerable difficulty when dealing with American firms. In order to avoid unnecessary delay in correspondence samples should be submitted in the first instance.

SPAIN.

TOO DRY FOR RAINCOATS.

[Consul Frederick T. F. Dumont, Madrid, Daily Consular and Trade Reports, Jan. 19, 1914.]

The rainfall in most of Spain being very slight, the trade in raincoats is limited. No coats are manufactured in this consular district. Dealers buy from England and pay either cash with order or draft at 30 days, according to the standing of the purchasing house. It is stated that goods are usually ordered from catalogues, the trade not being important enough to warrant sending buyers to London for raincoats alone. No resident salesmen for these goods have been found, and department stores are unknown. The usual large store in Madrid carries from 10 to 50 raincoats in stock. Certain houses are distributors to the trade and do a retail business in Madrid as well.

Apparently the best way to get this trade is to forward catalogues and samples direct to Madrid houses. A request for American catalogues was recently received from one house here. Correspondence should be in Spanish, and catalogues in the same language are advisable.

TURKEY.

MODERN CLOTHES MORE GENERALLY WORN.

[Consul Leslie A. Davis, Harput, Commerce Reports, Mar. 10, 1915.]

Articles of wearing apparel that are now imported from the United States in small quantities might be sold more extensively. The rapid increase in the sale of secondhand clothing is an indication of the possibilities in this line. The dealers in these goods have no difficulty in selling all they can get and report a growing demand for them, due largely to the return of many Armenians who have lived in the United States. The men in this region are gradually discarding their native "entari" (a union waist and skirt, in appearance like a woman's dress) for modern clothes, which they find more convenient. Style is of less consideration than cheapness. One frequently sees men wearing secondhand women's jackets.

CHAPTER X.

GLOSSARY.

Following is a glossary of the various fabrics employed in the manufacture of men's ready-made clothing. The description of the fabrics has been gathered from the following sources: Bennett's "Woolen and worsted glossary," Cole's "Encyclopedia of dry goods," Mercury "Cotton yearbook," Mercury "Wool yearbook," National Association of Wool Manufacturers' "Textile glossary," Tariff Board's "Cotton and wool manufactures."

Alpaca.—A thin, glistening, double-fold fabric, with a fine cotton warp; the filling spun from alpaca, the curly hair of an animal of the camel tribe found in South America.

Beaver cloth.—A heavy, double-woven, smooth-faced woolen fabric, used for overcoats.

Brilliantine.—See Mohair.

Broadcloth.—A fine, wide, lustrous, woolen cloth, usually woven plain and commonly black, finely dyed, dressed, and finished with a surface slightly napped.

Buckram.—A coarse, plain woven linen or cotton material, in width 24 inches, heavily sized with glue or gum, stiffening the fabric to a degree making it suitable for use in clothing manufacture for internal stiffening of garments, coat lapels, etc., to keep different parts of garments in a required shape.

Canvas.—A term applied to heavy, plain, unbleached, dyed, or yarn-dyed fabric, of different grades or weights. Properly made of ply yarns, although the term more frequently applies to fabrics of such similar appearance made without or partially of ply yarn.

Cassimere.—A general term for a large and popular class of woolen cloths, made commonly in widths of 27 and 54 inches. The fabric, usually fine length texture, woven both plain and twilled and in many fancy effects, is constructed of yarns prepared by the "carding" process, as opposed to "combed" or worsted yarns. The pattern is always produced in the loom and ordinarily is confined to conventional plaids, checks, and stripes in quiet effects.

Cheviot.—A loosely twill-woven cloth, usually of a roughish character, made from the wool of the Cheviot sheep.

Chinchilla.—A thick, heavy, double-woven fabric, with a long napped surface curled up into little tufts in imitation of chinchilla fur and especially adapted for overcoatings.

Corduroy.—A thick cotton pile material, corded or ribbed on the surface.

Cotton worsted.—A medium or coarse yarn fabric, to imitate woolen fabrics of the finest worsted class, used to manufacture men's suiting and trousering of cheap sort. It is made in stripes, checks, and plaid patterns by use of dyed yarns of different coloring. The variations in the construction of the fabric are almost unlimited, and when the construction is right the fabric shows a clearness of detail in design that can be found only in high-priced worsteds.

Covert.—A light or medium style of fabric made from double and twist warp yarns with single-yarn fillings. The cloth is usually rainproofed and originally was used for outing or sport coats, but now applies to all fabrics that have an appearance akin to the standard fabric.

Doeskin.—A compact, closely woven, fine-twilled (satin face), face-finished fabric, the woolly appearance produced by finishing with a nap; commonly dyed black.

Farmer's satin.—A lining material in extensive use for men's coats and vests. The fabric is strong and durable and composed of wool or of a fine cotton warp and worsted or mohair weft. It has a satin like surface and is dyed black and in plain colors.

Frieze.—A coarse, thick, and heavily napped woolen cloth used exclusively in the manufacture of warm overcoats. The fabric has an irregular nap. It has been generally displaced by chinchilla.

Hair cloth.—A variety of cloth constructed of cotton or linen warp and a weft of hair. Cloth made wholly or partly of hair, especially of the horse or camel, and used at present chiefly as an interlining. Genuine hair cloth is elastic under all conditions of the weather.

Homespun.—The name applied to a number of different fabrics, usually a coarse and loosely woven material of medium-grade wool, with a rough finish, woven in imitation of the cloth formerly produced in the home on the hand loom.

Kersey.—A heavy, closely woven, woolen fabric, fulled so as completely to conceal the warp and weft threads, the surface being finished with a short and extremely fine nap. It is used chiefly for overcoats. The fabric is made in a variety of weights and qualities, usually 54 inches in width, and is dyed in plain colors. The term kersey is also used to describe a coarse twilled cloth, woven with a cotton warp and woolen weft, used to a limited extent in manufacturing cheap clothing.

Italian cloth (farmer's satin).—A satin fabric used chiefly for lining. The fabric shows a particularly glossy appearance on the face, obtained by calendering or mercerizing and calendering. (See Farmer's satin.)

Melton.—A stout, woolen cloth, fulled, sheared, without a nap; is neither pressed nor finished. Also made with cotton warp and woolen weft.

Mohair.—A light, thin, lustrous fabric of great durability; from the wool of the angora goat. Mohair, brilliantine, and sicilian are fabrics having the same organization and construction. They are each woven with cotton warp and a mohair or alpaca weft. Brilliantine is the finest and most closely woven, and presents the brightest and most lustrous surface. Mohair is a grade lower than brilliantine, while sicilian is distinguished by being a somewhat heavier and stouter fabric than either of the others.

Satin.—The true satin is made entirely of silk, or with a fine silk warp and a cotton weft, and is specially noticeable for its luster. It is a warp or weft surface-cloth in which the intersection of warp and weft is so arranged as to be imperceptible, thus giving the fabric its great smoothness.

Satine or sateen.—A fine-threaded, close-twilled cotton fabric, smooth, soft, and lustrous; in various colors and woven in various widths and varieties. The warp or the filling only appears on the surface of the fabric, according to whether it is a warp sateen or a weft sateen.

Satinet.—An imitation of the true satin in mercerized cotton or other yarns. The weave does not fulfill the conditions of the real satin as regards order of intersections.

Serge.—A generic title under which is classed a large number of fabrics of twill construction, woven of worsted, silk, or cotton yarns, and variously dyed, finished, and ornamented; as silk serge, serge suiting, storm serge, mohair serge, etc. Serge suitings are a variety of light wiry worsteds woven with a flat twill and dyed black or in shades of navy blue; in width, 54 inches. A lining of cotton or linen warp and wool or mohair filling.

Sicilian.—A cloth made from a fine cotton warp and a thick mohair weft employing the plain weave. (See Mohair.)

Silesia.—At present the name is applied to a light, thin, closely woven, and finely twilled cotton fabric with a highly glazed and polished surface produced by calendering, in width usually 36 inches, dyed black and in colors and also bleached. The lower grades of silesia are finished with considerable dressing, while the higher grades are soft finished.

Tartan.—A woolen or worsted cloth woven with stripes of different colors crossing each other at right angles so as to form a definite pattern of checkered or plaid effects. This variegated cloth was formerly the distinctive dress, usually of elaborate design and color scheme, of the Scottish highlanders, the different clans having each its peculiar tartan.

Thibet.—A strong, compact, twill-woven cloth, used generally for overcoats, in weight and texture occupying a place midway between melton and cheviot. The fabric is more elastic and softer than melton and not so nappy as cheviot. It is commonly dyed black or in shades of navy blue, and in width is 54 inches. The nap being very short and lying close to the surface of the cloth causes the goods to assume a rough, unfinished appearance.

Tweed.—A finely woven twilled woolen fabric of soft, open, and flexible texture. The face of the cloth commonly presents an unfinished appearance rather than a sharp and clearly defined pattern, and the texture, while of good weight, is of a loose and elastic character. The best kind is made wholly of wool, but in inferior grades cotton is introduced.

Unfinished worsted.—A soft, dull-finished cloth with a slight nap.

Velvet.—A closely woven silk stuff having a very thick and short, close pile on one side, formed by carrying part of the silk warp over small wires and afterwards

cutting open the loops thus made. Inferior kinds are made with a cotton back and are commonly called cotton-backed velvets. Imitations and inferior qualities are so common that real velvet is commonly called silk velvet to distinguish it from them.

Venetian.—A closely woven worsted cloth with an upright warp twill and dyed in the piece. It is a high-grade fabric of stout texture, commonly dyed in plain colors. The luster is intensified by calendering, sometimes by mercerization as well; originally made in wool and later in both worsted and cotton.

Vicuna.—A soft twilled woolen cloth similar to cheviot, made of the wool of the Peruvian animal of the camel family, the supply of which is limited.

Wigan.—A very stiff, open, canvas-like interlining used for giving shape to garments.

Woolen.—A fabric made of wool prepared for spinning by the "carding" process. The yarn for woolen cloth is very slightly twisted, so as to leave the fibers as free as possible for the fulling process, and the fibers are criss-crossed and interlocked in every direction. Names are given to the various kinds of woolen cloths according to the way they are finished and the purpose for which they are intended. Broadcloth, melton, kersey, cassimere, cheviot, flannel, blankets, and doeskin are representative woolens.

Worsted.—A fabric composed of wool prepared for spinning into yarn by the "combing" process. In the manufacture of worsted the wool is prepared by combing, in which operation the long hairs are laid parallel with each other; the yarn is also harder spun, resulting in a stronger, smoother, and more level thread—in this respect quite unlike a woolen yarn. The typical worsted is a clear, smooth-handling fabric, in which structure and color are clearly defined, owing to the clearness and smoothness of both the yarns and the interlacing. There is every conceivable kind of fabric between the woolen and the worsted.

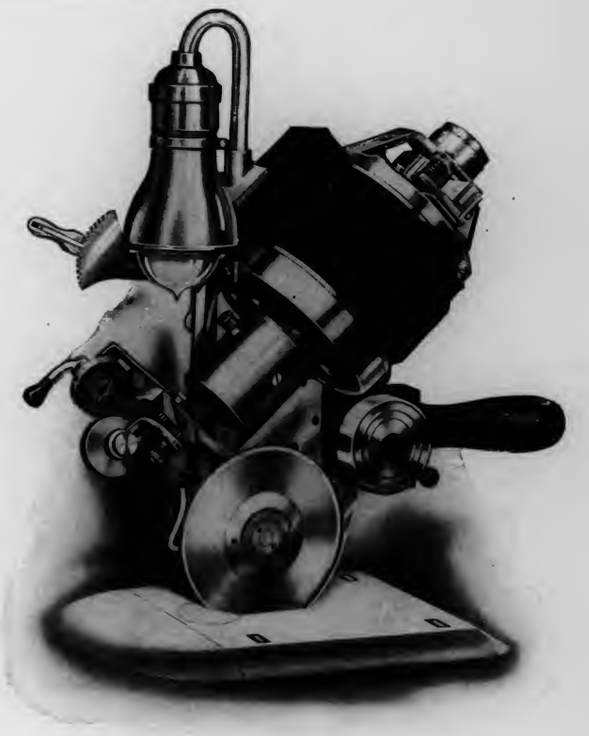

FIG. 1.—ROTARY OR CIRCULAR CUTTING MACHINE.

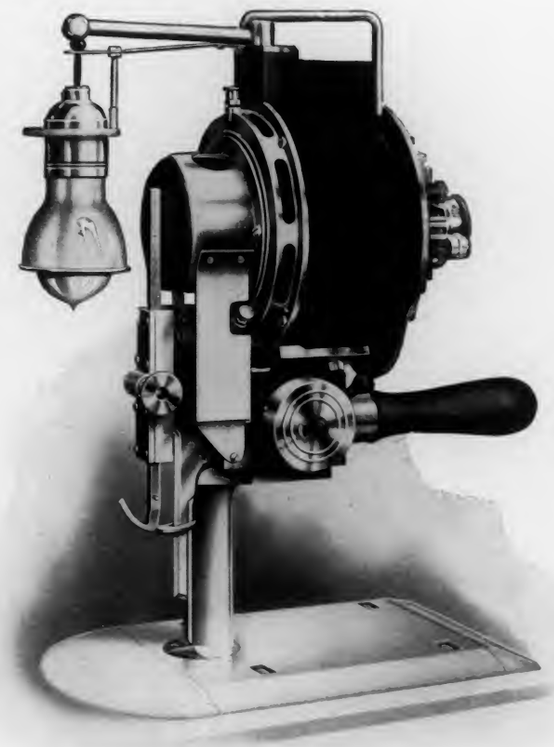

FIG. 2.—STRAIGHT-KNIFE OR RECIPROCATING CUTTING MACHINE.

FIG. 3.—MACHINE FOR SEAMING TROUSERS AND OTHER GARMENTS

Flat bed, single needle, and one under thread.

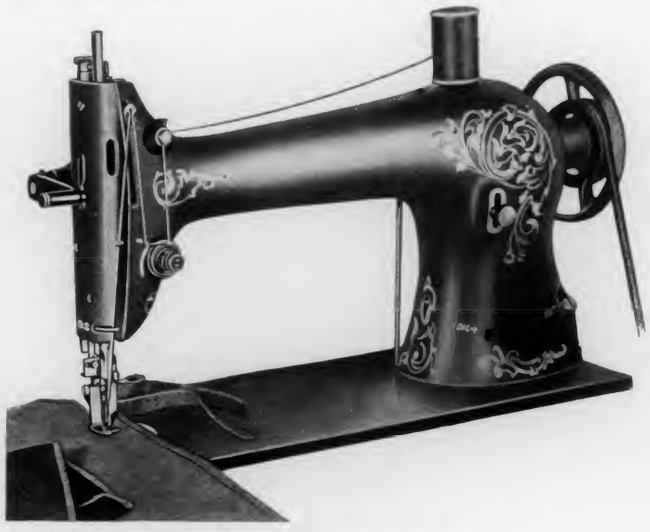

FIG. 4.—SEAM-CLOSING MACHINE.

FIG. 5.—LEFT FOREQUARTER OF A COAT MADE ON THE SEAM-CLOSING MACHINE.

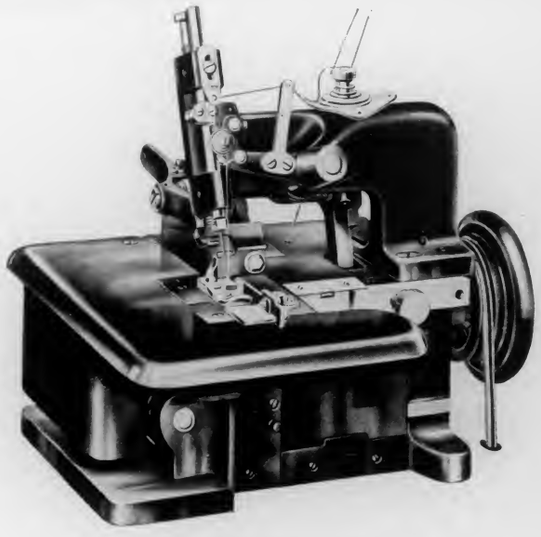

FIG. 6.—SERGING MACHINE.

FIG. 7.—WORK DONE ON SERGING MACHINE.

FIG. 8.—MACHINE FOR SERGING TROUSERS AND OTHER GARMENTS.
Flat bed, single interlock, without trimmer.

FIG. 9.—CANVAS-FRONT MAKING MACHINE.

FIG. 10.—WORK DONE ON CANVAS-FRONT MAKING MACHINE.

FIG. 11.—TWO-ROW STITCHING MACHINE.

FIG. 12.—WORK DONE ON TWO-ROW STITCHING MACHINE.

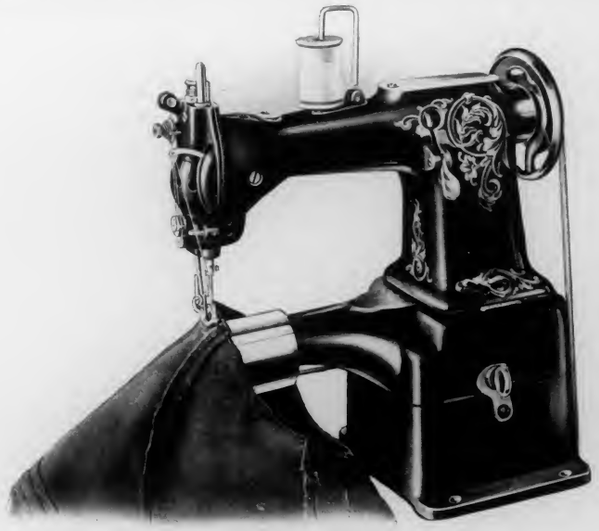

FIG. 13.—SLEEVE-INSERTING MACHINE.

FIG. 14.—TOP OF THE SLEEVE GATHERED ON GATHERING MACHINE READY TO BE INSERTED INTO THE COAT.

FIG. 15.—BUTTONHOLE MACHINE.

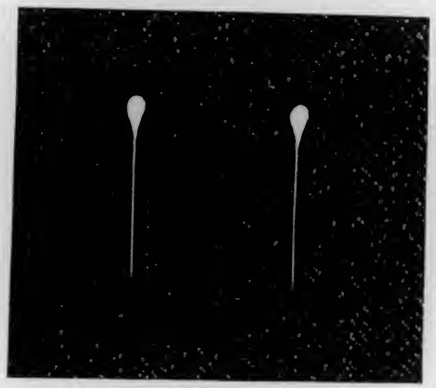

FIG. 16.—WORK DONE ON BUTTONHOLE MACHINE.

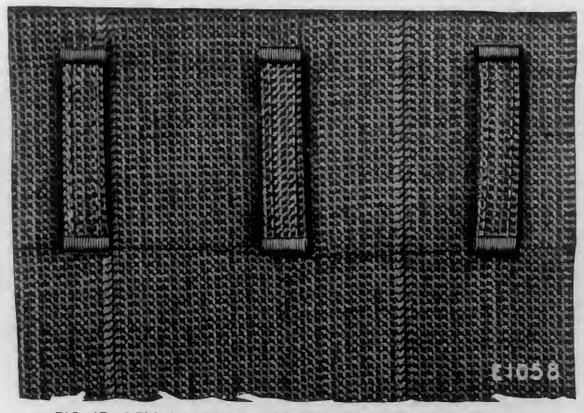

FIG. 17.—BELT LOOPS TACKED TO TROUSERS BY MACHINE.

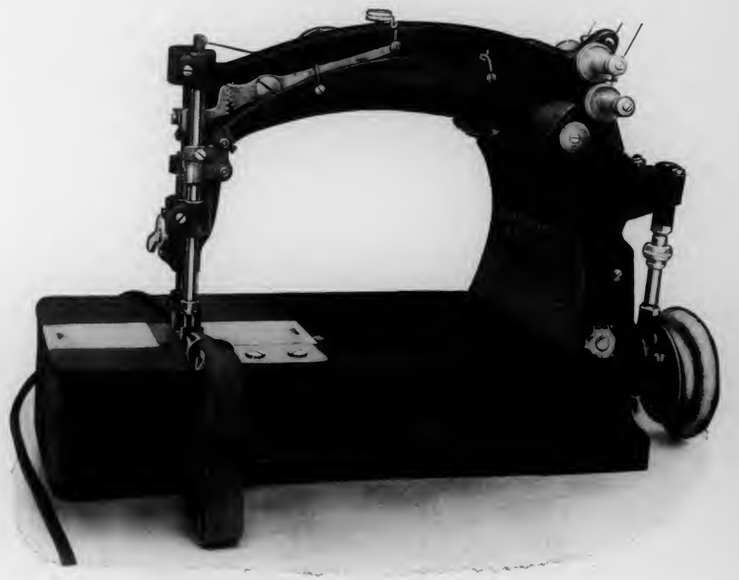

FIG. 18.—MACHINE FOR FOLDING AND STITCHING BELT LOOPS FOR TROUSERS.
Large arm, flat bed, and two needles.

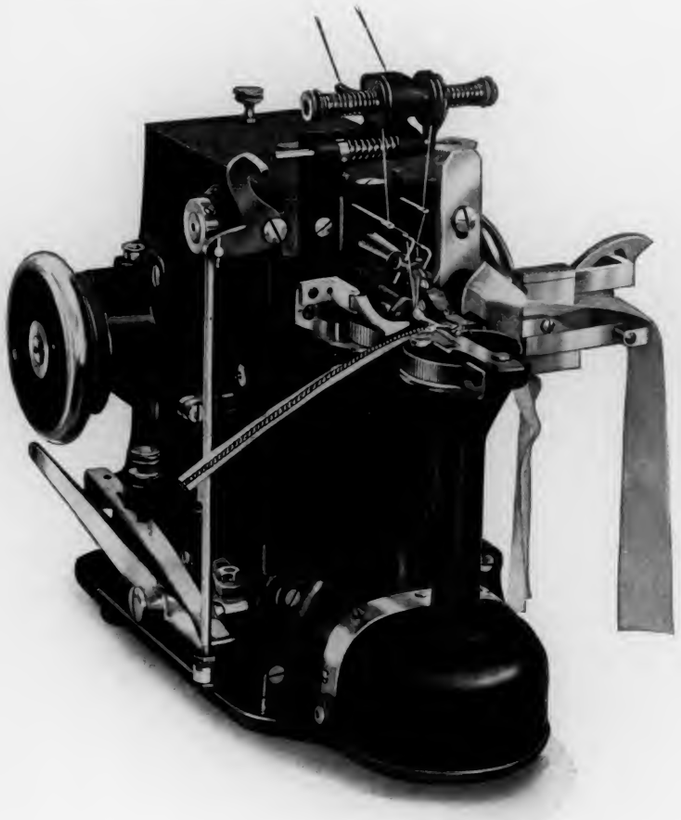

FIG. 19.—MACHINE FOR FOLDING AND STITCHING CONCEALED-STITCH BELT LOOPS FOR TROUSERS.

Cup-feed, overseaming machine with trimmer.

FIG. 20.—BUTTON-SEWING MACHINE.

FIG. 21.—BUTTONS SEWED ON BY MACHINE.

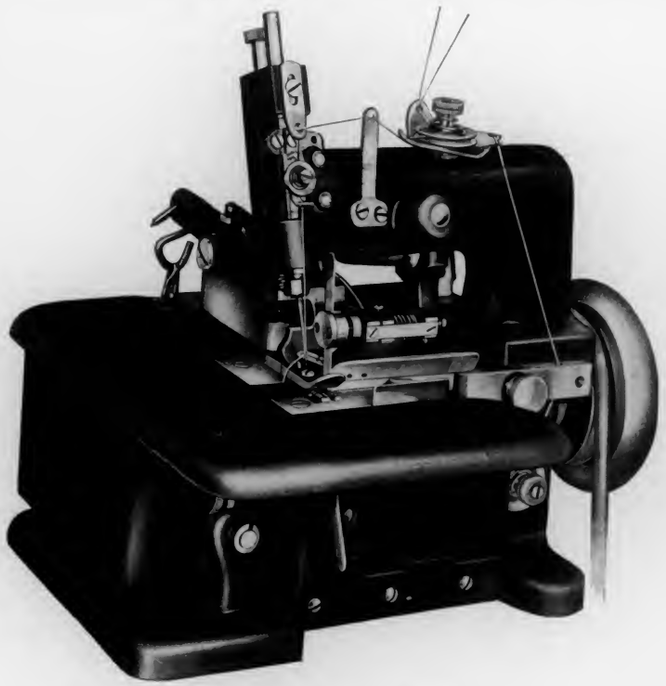

FIG. 22.—POCKET-MAKING MACHINE.

FIG. 23.—POCKET CLOSED ON POCKET-MAKING MACHINE.

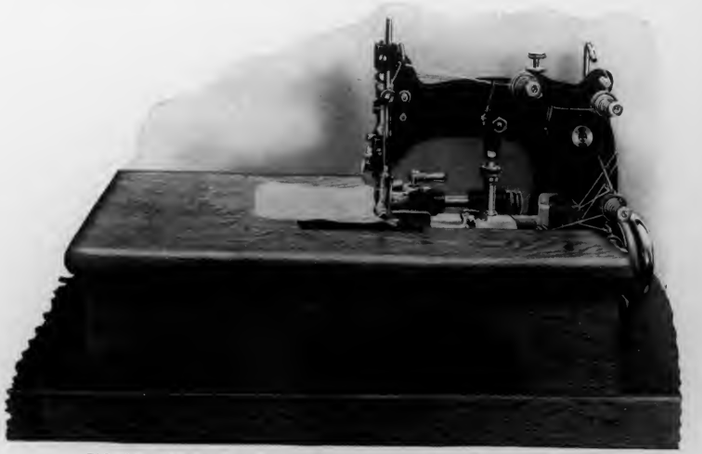

FIG. 24.—MACHINE FOR SEAMING POCKETS AND SIMILAR WORK.
Flat bed, single interlock, with trimming mechanism.

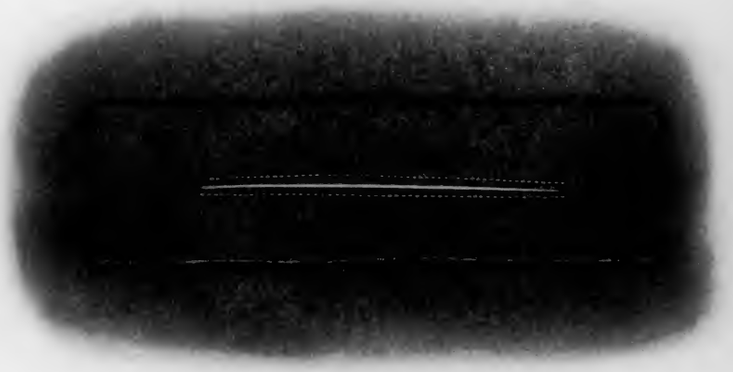

FIG. 25.—WORK DONE ON BACK-POCKET-MAKING MACHINE.

FIG. 26.—MACHINE FOR SEAMING OUTSIDE SEAM ON TROUSERS.

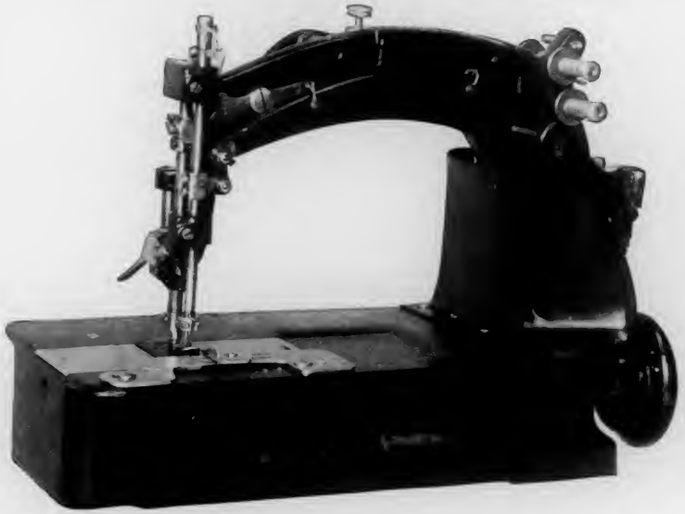

FIG. 27.—MACHINE FOR STITCHING CURTAINS AND WAISTBAND CANVAS TO FRENCH WAIST TROUSERS IN ONE OPERATION.

Large arm, flat bed, two needles, and two under threads.

FIG. 28.—LAP-SEAM FELLING MACHINE.

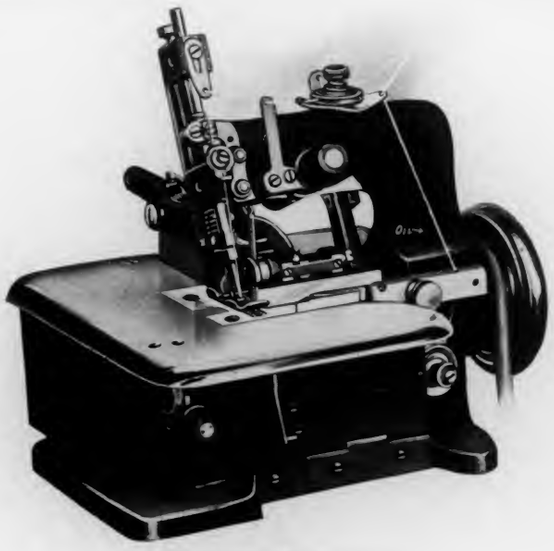

FIG. 29.—PANTS-FLIES MACHINE.

FIG. 30.—FLY BUTTONHOLES MADE BY MACHINE.

FIG. 31.—BINDING MACHINE.

FIG. 32.—COAT FRONT.

The foundation of the coat is the canvas shown below at the left and above at the right. The piece sewn on the lower part of the canvas is percaline, which serves as a stay for buttons and buttonholes and also to support the soft front. The darker material above this is a linen duck haircloth for the soft roll lapel. The black cloth is a wool interlining used around the armhole. The light cloth above the interlining is a small piece of haircloth to give form to the front of the coat.

FIG. 33.—UNDER COLLAR.

This consists of a smooth-finished cloth and a linen duck canvas. The canvas only is shown in the picture. The lower part is termed the collar stand. The long rows of fine stitching on this part are made by machine, because here strength and ability to hold a definite shape are needed. The wider flap of the collar is hand sewed, because flexibility as well as strength is essential.

FIG. 34.—COAT BEFORE IT IS LINED.

Canvas coat front in position. The canvas front is securely tacked to the pocket (black stitching). The canvas on the lapel is closely padded by hand to the coat; the white band along the edge of the coat is tape to keep the various parts in place. The shorter tape, which begins on the collar and runs part way down the lapel, is to keep the lapel and collar in shape and make them fit the neck closely. The white strip at the pocket and the one running up toward the armhole are known as linen stays, placed there to keep the pocket from tearing or sagging when heavy articles are carried.

FIG. 35.—FRONT OF COAT.

The garment is nearing completion. The small white stitches at the edge of the armhole are put in by hand, and the cloth is so manipulated as to make the armhole conform to the general shape of the body. This same method is followed in the back of a coat. The long white stitches are bastings.

FIG. 36.—INSIDE OF COAT.

The armhole shows the basting and working of the material before the sleeve lining is felled to the coat. All these basting stitches are put in by hand.

FIG. 37.—BACK OF COAT.

The white stitches along the edge of the armhole are done by hand, and at each stitch the cloth is drawn in, which makes the coat fit snugly into the arm and at the same time provides sufficient fullness over the shoulder blade to give the back of the coat correct shape.

FIG. 38.—SHIPPING ROOM.

When an order is ready for shipment, hanger trucks convey the garments from the stock room to the shipping room. Here each suit—still on a hanger—is suspended from a steel rod in a specially constructed packing case.

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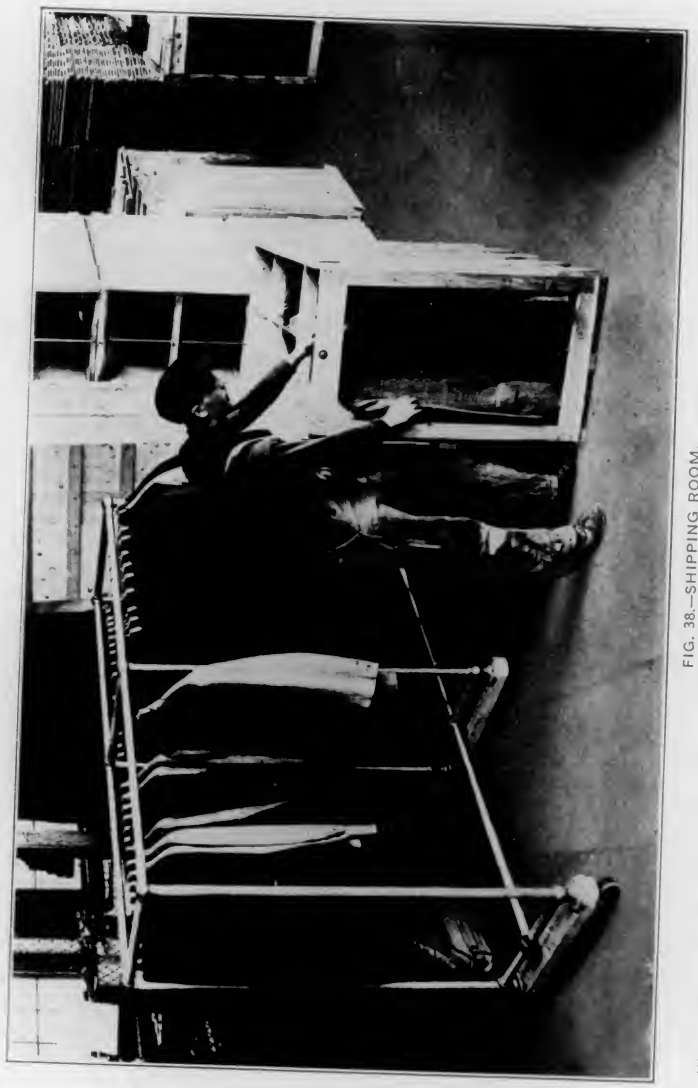

FIG. 38.—SHIPPING ROOM.

When an order is ready for shipment, hanger trucks convey the garments from the stock room to the shipping room. Here each suit—still on a hanger—is suspended from a steel rod in a specially constructed packing case.

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